

ORTHODOX



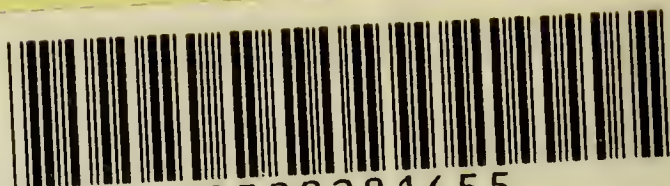
PHRENOLOGY.

SECOND EDITION.

20 Middle St Brighton

— cc —

I always valued the little work on
Phrenology, I read it long before I went
to London as a young man; & it was
a great pleasure to me to occasionally
drop in to Vago's workshop in Gray's Inn
& have a little chat with him. He was
modelled a big, finely-physiognomied, impos-
sible looking man, tall, as well as well-proportioned
& had a large & capable head. Though
he looked far more a workman than
author & poet. I think I never



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ORTHODOX PHRENOLOGY.

BY

A. L. VAGO.

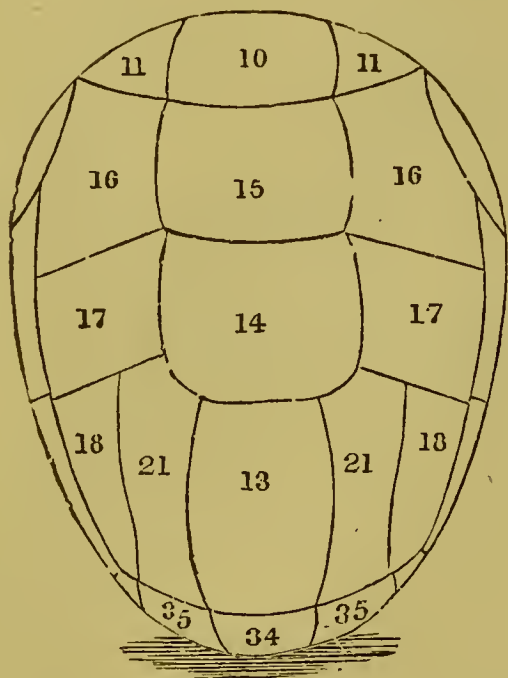
Second Edition.

“If our religion is a fable, the sooner it is exploded the better. If our government is bad, it should be amended. But we have no doubt of the truth of the one, or of the excellence of the other; and are convinced that both will be placed on a firmer basis in proportion as the minds of men are more trained to the *investigation of truth*.”—SYDNEY SMITH.

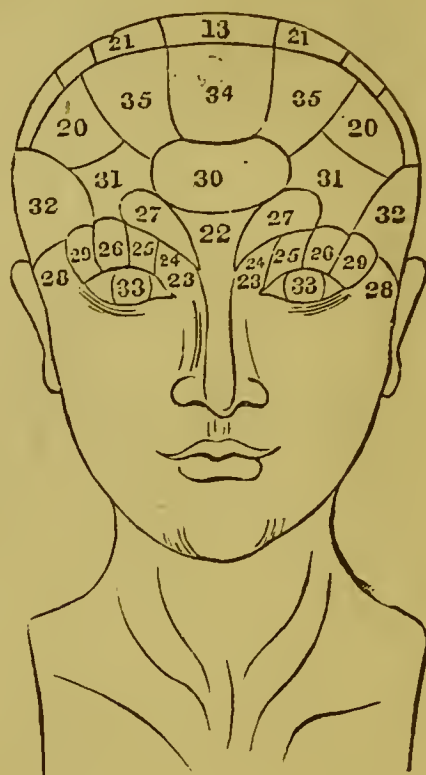
“It is true that a little philosophy inclineth man's mind to atheism, but depth in philosophy bringeth men's minds about to religion: for while the mind of man looketh upon second causes scattered, it may sometimes rest in them, and go no further; but when it beholdeth the chain of them confederate, and linked together, it must needs fly to providence and Deity.”—BACON.

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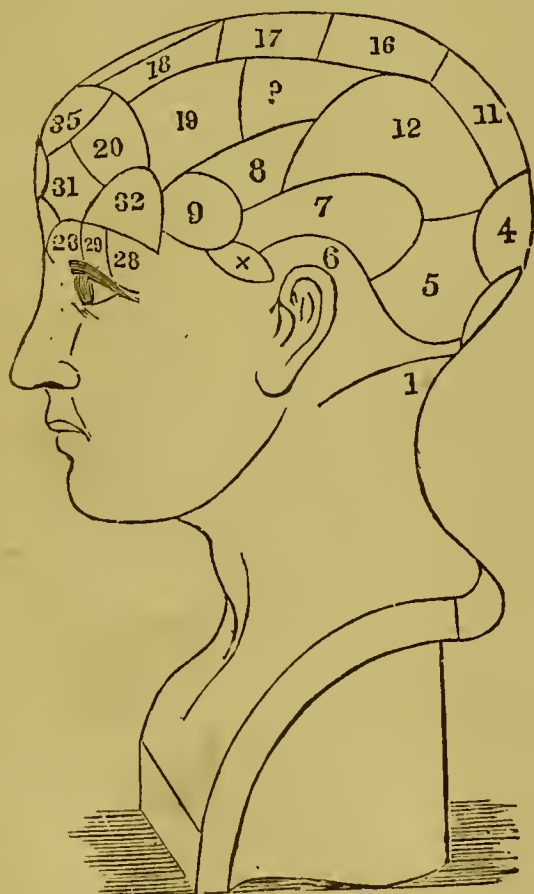
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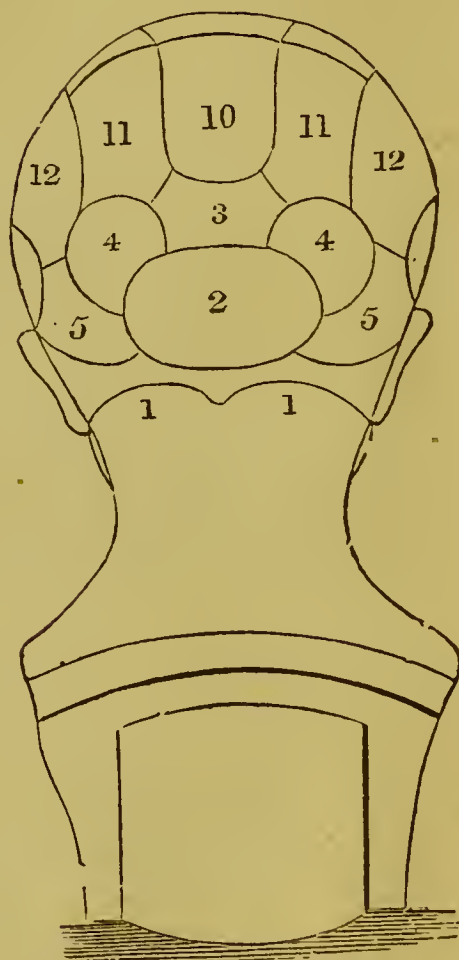
1.



2.



3.



4.

Chart for recording Development of Phrenological Organs.

	Small.	Moderate.	Large.	Full.	Average.
1. Amativeness					
2. Philoprogenitiveness					
3. Inhabitiveness					
4. Adhesiveness					
5. Combativity					
6. Destructiveness					
6½. Alimentiveness					
7. Secretiveness					
8. Acquisitiveness					
9. Constructiveness					
10. Self-esteem					
11. Love of Approbation					
12. Cautiousness					
13. Benevolence					
14. Veneration					
15. Firmness					
16. Conscientiousness					
17. Hope					
18. Wonder					
19. Ideality					
20. Mirthfulness					
21. Imitation					
22. Individuality					
23. Form					
24. Size					
25. Weight					
26. Colour					
27. Locality					
28. Number					
29. Order					
30. Eventuality					
31. Time					
32. Tune					
33. Language					
34. Comparison					
35. Causality					

Temperament,

Circumference of Head,

Inches

PREFACE.

As it is in the preface alone that an opportunity is afforded for saying something with regard to the title of this work, such opportunity will not in this, as in the first edition, be neglected. What will be attempted here will be to give a reason why the title "Orthodox Phrenology" was chosen; but as this will be better understood when the circumstances which led to its adoption are known, a word concerning these will form but a necessary preliminary. In the first place then, as a maker of phrenological heads, I have been asked if I was not ashamed of myself for carrying on a trade which tended to disseminate views which led only to materialism, and ultimately to atheism. With the view to ascertain the nature of the wrong which such questions implied, I was induced to examine the subject for myself. To accomplish this I read several works on Phrenology, and found that opinions were sometimes introduced which were inconsistent with, rather than supported by, the facts which Phrenology presented. Such of these that were considered of sufficient importance have been noticed and commented on in the present work. And as I found that a thorough knowledge of Phrenology does not incline the student to views that are heterodox, I was led to suspect that those who thought otherwise were guided merely by opinion. Of the justness of this suspicion I have since been convinced, by finding on inquiry that nothing is really known of Phrenology by those who regard its nature as being heterodox.

It is by the study of Phrenology that we learn that the faculties of the mind represent each a separate law written in our nature; and as these are *innate* there can be no doubt as to their being of "origin Divine." By Phrenology we learn that these faculties, though seemingly opposite in their nature, form, in due

proportions, a beautiful and harmonious whole ; that Benevolence, Veneration, and Conscientiousness being of these faculties, we learn that charity, humility, and integrity are virtues imposed by "Divine wisdom." And though Phrenology acknowledges faculties of Combativeness, Destructiveness, and Secretiveness (whose names convey the idea of their abuse rather than of their use), yet it also acknowledges others of an intellectual nature ; by which we can perceive that such faculties are necessary to stimulate and support us in our duties towards each other, ourselves, and our God. As in this manner Phrenology offers a system of theology which, from being furnished by Nature herself, is free from fraud and imposition, and is therefore a reliable guide in revealing to us the laws which govern our physical, moral, and intellectual natures, I have come to the conclusion that Phrenology is orthodox. And as the purport of the present work is to show this, I have chosen for its title "Orthodox Phrenology." This, then, is the reason why the book is so called ; and, such being its tenor, I hope it will meet somewhat the need of the times, now that the truth of the Scriptures is disputed even by the most learned bishops, especially as atheism is now so much on the increase, even among those who claim to be the thinkers of the age.

As the views advocated in this work were long ago hinted by Dr. Gall, it has been seen already that atheism would meet a "stumbling-block" in Phrenology. Those to whom this has been objectionable have tried to evade this block by repudiating Phrenology altogether ; others, clear-sighted enough to see that Phrenology is based on too firm a foundation to be thus put aside, have arranged a system of their own, in which they have omitted such faculties as point to duties which they prefer to regard as fallacious and useless. This has been ingeniously accomplished by Auguste Comte, the author of "*Philosophie Positive*."

Among those who have been at the pains to derogate Phrenology may be mentioned G. H. Lewes, who says of Phrenology, "Instead of surviving opposition, it has decayed with the declining opposition. It has ceased to be ridiculed, it has ceased to be declaimed against as immoral, and it has ceased

to occupy attention." From this he insinuates that Phrenology cannot be true. For one who has presumed to dictate what each philosopher, ancient and modern, should have said, instead of what he did say, to employ a test so unphilosophical seems unaccountable, and says but little for his judgment. As to Phrenology having ceased to occupy attention, this, from my own experience, I know to be false. In endeavouring to procure phrenological works, for which I have frequent applications, I have learned from many of the booksellers of London that such works are still much sought for, and command high prices, which would not be the case if the study of Phrenology was on the decline.

Another person of note who has assumed an aggressive position towards Phrenology is Sir David Brewster, late Principal of the University of Edinburgh. On the opening of the session, he said to the professors and students, "To desire more knowledge of our neighbour than is shown in his daily life is to seek an unenviable privilege, and to gratify a dangerous curiosity. Society could hardly exist had such a power as physiognomy been conferred on man. If the soul of man is inwrought into every part of his corporeal frame, modifying its outline, and moulding its form—the body the *woof*, the spirit the *warp*—the fabric cannot be otherwise than material. In the interests, then, of truth, morality, and religion, we warn you against speculations thus fraught with danger." Here is an old denunciation which has assailed nearly every attempt at discovery. To such Socrates owed his death, Galileo his persecution; but the discoveries of these men are not now regarded as either dangerous or demoralising. There seems a deplorable ignorance in regarding as vile the connection which God himself has chosen to make between the body and soul.

Locke says, "All the difficulties that are raised against the thinking of matter, from our ignorance or narrow conceptions, stand not in the way of the power of God if He pleases to ordain it so." "Hoping, as I do," says Bishop Watson, "for an eternal life, I am not disturbed by my inability clearly to convince myself that the soul is or is not a substance distinct from the body."

While Phrenology offers the means, as it does, to rescue the mind from the catalogue of incomprehensible mysteries in which this problem has so long been included, its study will have sufficient recommendation to overcome such vain fears as those entertained by Sir David Brewster. That there is a physiognomic instinct or innate power to judge of character from appearances there is no reason to doubt, notwithstanding what Sir David Brewster would have us believe to the contrary. When this power, guided by scientific principles, shall become general, it may induce us to mend our ways, that we may the better bear inspection; and society will then be improved rather than dissolved by it, as Sir David Brewster fears. But the study of Phrenology has its recommendation less in the art which it furnishes to decipher the mental characteristics of others than in the means it affords of learning to know ourselves. It is only by an acquaintance with the power and weakness of our faculties that we can know what to undertake without disappointing our hopes of success. To acquire this knowledge involves no less than the study of the mental constitution of man, which has in all ages occupied minds of the highest order, and is justly termed—

“The proper study of mankind.”

And there can be no doubt that if we learn, as Robert Burns says—

“To see oursels as ithers see us !
It wad frae mony a blunder free us,
An’ foolish notion.”

It is less in the preface than by the perusal of this work that I hope the reader to become convinced that the misgivings of Sir David Brewster are perfectly groundless.

London.

A. L. VAGO.

ORTHODOX PHRENOLOGY.

PHRENOLOGY is the science which treats of the Mind in connection with the Brain. It proposes—

Firstly,—That the brain is the *material* instrument through which the mind holds intercourse with the external world.

Secondly,—That the brain is an aggregate of parts (otherwise cerebral organs), each of which has a special and determinate function in subserving to one of the various mental faculties of which the mind consists.

Thirdly,—That the cerebral organs (which agree in number to the mental faculties) are developed each in proportion to the power of its particular function.

Fourthly,—That the skull (though the harder substance) conforms to the shape of the brain, and is, therefore, indicative of the power or weakness of the mental faculties ; just as the appearance of the body indicates to the physician the presence of health or disease.

Concerning the first proposition, it may seem strange that the free and unbounded mind should be ensconced into so mean a space as that afforded by the interior of the skull. To some minds this view of the case is considered sufficient at once to overthrow the very foundation upon which Phrenology is based. But however it may determine the belief, the truth of Phrenology is in no wise affected by *ridicule*; nor does it become a mind disposed to inquiry to be led or prejudiced against any subject by the derision which has been cast upon it, for if censure could falsify a science, a *true* one could not be found, as none, not excepting the most holy, have escaped derision. On the other hand, nothing could more glaringly expose a weakness of judgment than to yield our assent to a proposition because it is couched in fine terms, since a *fallacy* may be conveyed in the finest eulogy that was ever penned as easily as a *truth* may be obscured by obloquy. If the truth of the Phrenological proposition which connects the mind with the brain rested upon being expressed

with elegance of phrase, there would be no want of such evidence of its truth, for Lord Byron says, in reference to the skull—

“Yes, this was once Ambition’s airy hall,
The dome of thought, the palace of the soul.”

Pope, also, in speaking of the head, says—

“That noble seat of thought ;”

and Drummond, in his “Pleasures of Benevolence,” says—

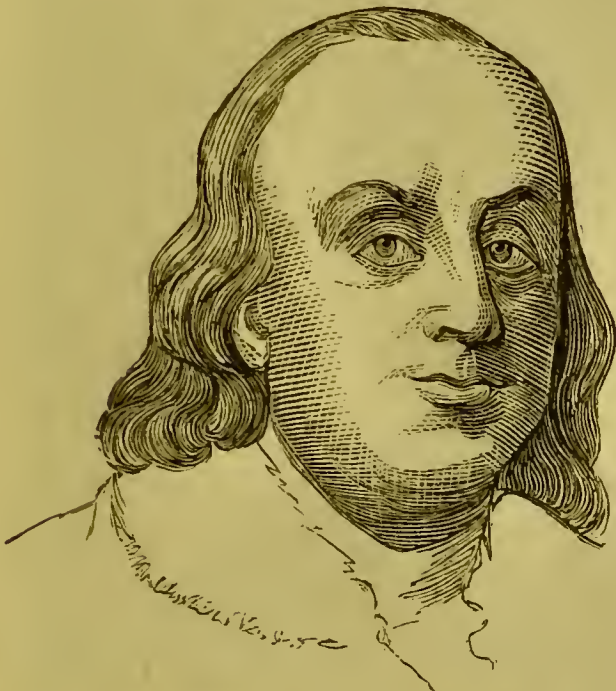
“In that small world, the Brain, each virtue claims
Her own fair mansion. Veneration there
Has found a temple ; there Benevolence,
As in an ivory palace, holds her court
High in front and prominent, to greet
Stranger and friend with salutation kind,
And gracious welcome—there lodge all the powers
Percipient and reflective ; those which lead
To question Nature, to arrange, compare,
And truth from truth elicit—those which dip
The artist’s pencil in the hues of heaven,
That build the fretted dome, that shape and clothe
The marble block with God-like lineaments,
Or give sweet numbers to the poet’s song,
With beauty, grandeur, imitative grace,
And eloquence Divine.”

Since, then, *ridicule* does not make false what is true, nor *fine words* make veritable what is false, the sober lover of truth will do well to dismiss both, and seek evidence of the truth of the proposition now under consideration in nothing short of *fact*.

What appears strange in so spacious a power as the mind having its residence in the head will readily disappear when we consider the subtlety of the mind, which is such as to admit of its abode even in a nutshell. This explanation necessarily renders it difficult to understand how the mind, being so subtle, can be traced to the brain. The fact, however, that the operations of the outer world reach the mind only through the impressions they make upon the eye, ear, nose, tongue, and skin, and their respective nerves, which terminate in the brain, sufficiently justifies the conclusion that the mind and brain are connected. For when either the optic, auditory, olfactory, glosso-pharyngeal, or sensor nerve is severed or divided from the brain, the mind ceases to be *affected* by the impressions which such nerve communicates to it from the external world when connected with the brain. Although this alone affords convincing proof that the brain *is* the organ of the mind, phreno-

logists found this conclusion rather upon the relation observed between the degrees of intelligence manifested by different organised beings and the volume and structure of the brain, not only when species is compared with species, but when individual is compared with individual. (See cuts 5, 6, 7, and 8).

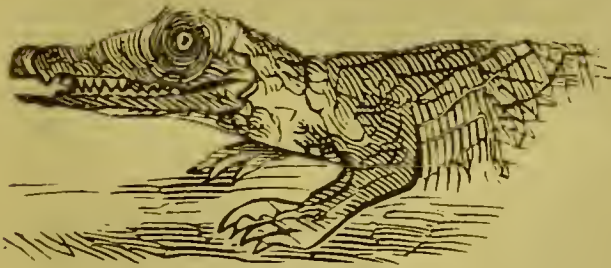
That the brain *is* the organ of the mind is further ascertained



5.—FRANKLIN.



6.—AN IDIOT.



7.—CROCODILE.



8.—TIGER.

by the *dependence* of the one upon the other, as observed by physiologists in cases of brain-fever arising from fright, or some unfavourable impression upon the mind, and of a cessation of mental manifestation or delirium resulting from concussion or disease of the brain. "No one," says Dr. Samuel Solly, in his work on the brain, "who has once observed a case of concussion, can doubt that the intellectual faculties are dependent in some way or other on the brain."

The truth of the second proposition, which assumes that the brain consists of *various distinct organs*, is strongly confirmed by its conformableness to the conclusions arrived at by all eminent

philosophers, namely, that the mind consists of various special faculties. For, allowing that the brain *is* the organ of the mind, it follows, as a necessary consequence, that it should be regarded rather as an apparatus of organs, just as the mind is regarded *not* as a single or homogeneous power, but as consisting of several *primary faculties*; seeing that, throughout all the operations of the body, each special function has its particular organ, as respiration the lungs, digestion the liver, &c. It was not this mode of reasoning, however, that led to the discovery of the proposition that the brain is a congeries of organs corresponding to the faculties of the mind; but rather the fact that *particular mental manifestations are observed to be invariably accompanied by particular forms of the head*. Therefore, to regard the proposition founded upon the correlation thus observed between the faculties of the mind and the cerebral organs otherwise than as true is to assume that the brain is *exempt* from the order which is seen to prevail throughout the rest of the animal organism—an hypothesis in itself too palpably absurd to need any comment to show its untenableness.

In assuming that the power of the mental faculties is in proportion to the development of the cerebral organs, nothing is advanced by the third proposition that is not perfectly consistent with the universal law that *size is a measure of power*. A large piece of wood is stronger than a small piece. It is true that a large beam of wood may not be so strong as a small bar of iron. Here, however, the *conditions* are different, but where *these* are equal the law always stands good. It is the same with the brain. The mental faculties are sometimes manifested in a more powerful degree in connection with small brains than with large ones. This fact, though often resorted to as being opposed to the proposition that the size of the brain is a measure of its power, is not overlooked by phrenologists, who well know that it results from a *difference of temperament*,* and therefore affords no objection to the rule that size is a measure of power, even as it regards the brain, when the conditions are equal. The brain being all of a piece with the rest of the body, it is but natural to suppose that it partakes of the *same* qualities, not only in the fact of the power of its functions being in proportion to the perfection of its development, but also in being improved by exercise, weakened by inactivity or over-exertion, and in being similarly affected by disease.

Thus, then, as tumours or excrescences may arise in different parts of the body without occasioning either pain or inconvenience, so similar tumours may arise in different parts of the brain without apparently impairing the functions thereof. The organs thus

* The temperaments will be explained in due order.

enlarged necessarily exclude the possibility of judging of the power of their functions. But, contrary to what might be expected, it does not invalidate the fact that *the brain is the organ of the mind*, because what appears disease of organ is not always accompanied by disease of function. If a swelling took place at the knee-joint, without causing pain or inconvenience in walking, no sensible person would, on that account, doubt that the leg conduces to the power of locomotion. As, then, in the case of the body, the relation between organ and function is not interfered with by such phenomena, so similar phenomena in the brain, which is subject to the same laws as the rest of the body, in nowise affect the phrenological propositions. Besides, it is much to be doubted that an excrescence growing on an organ implies disease of the organ itself. Almost every one is aware that different parts of the body may be painfully affected, and even disabled from use, without any apparent alteration in the structure of such parts—a slight difference of colour being mostly the only visible alteration. On examining the brains of persons mentally deranged, physiologists have sometimes been unable to find any corresponding alteration of structure, some of the veins that are distributed about the brain being only slightly more red than the rest. As we learn by these facts that what is called disease of brain may be unaccompanied by disease of *mind*, and that disease of mind may be unaccompanied by any apparent disease of *brain*, it would seem that pathology in such cases can afford but little in favour of the connection between the mind and brain, as maintained by phrenologists. But to cut Phrenology off from among the sciences on this account would be as unphilosophical as to hold all physiological research as unscientific because it is beset by the like obstacles.

Instead, then, from such diseases, to renounce all further investigation of the science which promises to give a *definite* knowledge of the brain and its functions, and a system of metaphysics founded upon *natural facts*, we should be content to learn (as facts themselves show) that excrescences may take place in the cerebral organs without impairing their functions, and also that the mental faculties may assume an uncontrollable power by an undue supply of blood to particular parts of the brain, and produce either a prodigy or a maniac. This subject, properly considered, would explain how it is that an unusually large organ may be found where there appears no corresponding power, and also that an extraordinary faculty either for music, calculation, &c., may be performed through a comparatively *small* organ, when that is well sustained by the arterial system. Such cases, however, are but

exceptional, and probably exist only in the minds of those who are incompetent to judge between either sound and unsound organ or function. Dr. Solly, in reference to this subject, says, "Part of our ignorance regarding the connection between diseased structure and impaired function has arisen from the superficial mode in which *post-mortem* examinations are frequently conducted, from the omission of careful observation of the relative colour of the cineritious and medullary neurine; so that it frequently happens that we meet with reports of cases of paralysis during life being unattended with the smallest morbid appearance after death, when, in all probability, the change which really existed was passed over, namely, a much deeper colour than natural of the cineritious neurine, an appearance unaccompanied with any other change not unfrequently found in connection with paralysis, and one which we are therefore as much justified in considering as the efficient cause of that malady as *ramollissement*, extravasation, or any of the more palpable morbid alterations."

The fourth proposition, namely, that the skull conforms to the shape of the brain, is allowed by every eminent anatomist. Dr. Lawrence, late Professor of Anatomy and Surgery to the College of St. Bartholomew's Hospital, London, in his "Lectures on Man," says of the skull that "the general capacity and particular forms depend entirely on the size and partial development of the brain."



9.—HYDROCEPHALUS, OR WATER ON THE BRAIN.

And Dr. Mayo, late Professor of Anatomy and Surgery to the Royal College of Surgeons, in his work on "Human Physiology," after considering the relation between the mind and brain, says, "Then it is certain that the skull is formed after the brain, and moulded upon it; and that very moderate attention will enable an anatomist for the most part to distinguish those prominences which are caused from inequalities of the bone from those which mark the proportions of the brain—so philosophical in its conception was the theory of Gall, which proposed to determine character by reference to the height, and breadth, and prominence of different parts of the skull." To this view Sir

Charles Bell, Magendie, and many others equally great, all agree.

But, in opposition to these authorities, it is frequently said that the skull is too hard and unyielding to be directed by the soft

pulpy brain. This in words may seem very plausible ; but when we see in *fact*, as in cases of hydrocephalus, that the *skull is susceptible* of such extraordinary enlargement from water on the brain, it cannot but appear natural that the skull should yield to the brain also. (See cut 9.)

The foregoing propositions are founded upon the observations first made by Dr. Gall, who, when a schoolboy, used to observe a prominence of the eyes in those of his companions who were remarkable for their good memory of words. When at college, where he was educated for the medical profession, he continued his observations, remarking a peculiar formation in the heads of such as were noted for any particular faculty ; and when he found different persons with the same striking characteristics he also remarked a *similarity* in the form of their heads. In this manner he was led to surmise the *connection* of certain mental faculties with particular parts of the brain ; and thus he discovered the science of Phrenology. So thoroughly was he convinced of the accuracy of his conclusions, which were more and more confirmed



10.—DR. GALL.

by every case that came under his notice, that he was ultimately induced to make his discoveries publicly known. This he began to do by lecturing on the subject of Phrenology at Vienna, in the year 1796 ; but, owing to some misapprehension on the part of the authorities of that place, his lectures were suppressed, which resulted in his leaving Germany, his native country, and settling in Paris, where he practised as a physician, and laboured unremittingly to promote and promulgate the science of his discovery until his death, in the year 1828. From this account, however, we should not regard Dr. Gall as having *created*

Phrenology ; because the principles of the science *existed* before their discovery, and were, therefore, not created by the discovery of their existence. Though great credit is due to Dr. Gall for having *arranged* his discoveries into that systematic order which passes exclusively by the name of Phrenology, yet, the *connection* between the mind and brain upon which Phrenology is founded was recognised by others long before his time. Locke says, "Those, methinks, who, by the industry and parts of their ancestors, have been set free from a constant drudgery to their backs and their bellies, should bestow some of their spare time on their *heads*, and open their *minds* by some trials and essays in all the sorts and matters of reasoning."



11.—GREENACRE.

Shakespeare, at a much earlier period, wrote of—

"Foreheads villainous low."

(See cut 11.) Similar sentences are often to be met with among the old authors.

Though little, sufficient, however, has been said to show that it was not by cutting and hacking about the skull and brain, and allotting different names

to different compartments according to fancy, that the science first originated, as is erroneously supposed by many at this present time.

Phrenology owes not its discovery to the dissecting-room, for it will readily appear that its study does not *necessitate* an acquaintance with the anatomy of the brain ; although a knowledge of the same would, of course, be *advantageous* to the practical phrenologist. Nor is it necessary to enter here into a tedious description of the anatomy of the brain to show that nothing is advanced by Phrenology that is at all inconsistent with what is known of the anatomy of the brain, since, for this purpose, it will suffice to refer to the conclusions of those who have already considered these subjects in connection with each other. Professor Hunter, M.D., says, "I have examined Phrenology in connection with the anatomy of the brain, and find them beautifully to harmonise ; and for the last ten years I have taught Phrenology in connection with anatomy." Dr. Dunn, F.R.C.S. Eng., says of Dr. Gall, "To him and his able coadjutor, Spurzheim, medical science, as well as physiology and psychology, is under great obligations."* The same gentleman, in reference

* "Physiological Psychology."

to this subject, quotes Dr. Todd's "Cyclopædia of Anatomy and Physiology" thus: "Anatomy," says Dr. Todd, "points to the conclusion that the office of the convolutions is connected with the functions of the mind; and it seems not improbable that the phrenological view which assigns to *certain convolutions* a special office connected with some particular faculty or faculties is true." Mr. Abernethy, one of the highest medical authorities of his time, both believed and taught the doctrines of Phrenology, and lectured on them to the Court of Assistants of the College of Surgeons of London; which, it is presumed, he would not have done had he found them *inconsistent* with anatomy. Indeed, on this very subject,

he says, in his "Reflections on Phrenology," "I readily acknowledge my inability to offer any rational objection to the system of Phrenology." It has also to be borne in mind that, as cerebral anatomists and physiologists, Dr. Gall, the founder of



12.—BRAIN (Side View).

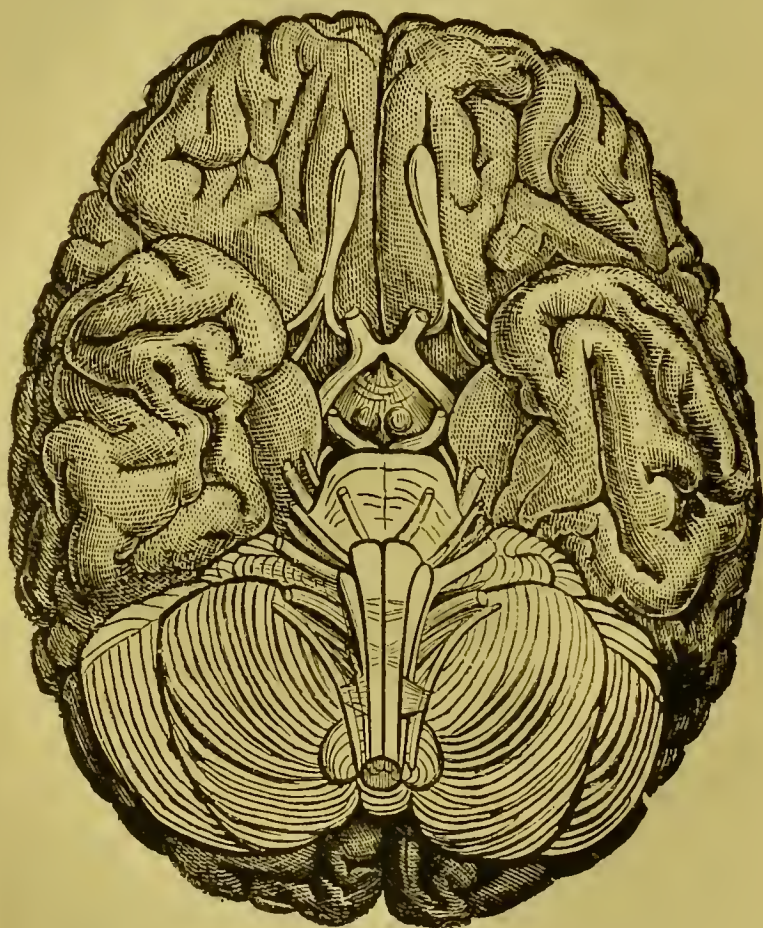
Phrenology, and Dr. Spurzheim, the most zealous advocate and propounder of its principles, still rank with the first. Indeed, the investigations of the most careful physiologists tend less to supersede than corroborate the information contained in the works of Drs. Gall and Spurzheim on the anatomy of the brain; for Dr. Gall's work, "*Anat. et Phys. du Syst. Nerv.*," in the French language, and Dr. Spurzheim's work, "Anatomy of the Brain," in the English language, are both regarded by the most competent authorities as *masterpieces* on the subject of which they treat.

In reference to the psychological classification by Gall and Spurzheim, Dr. Lacock, F.R.S.E., says, "I am inclined to adopt that classification as the best arrangement that could be adopted until our physiological analysis of mental phenomena has had a

more scientific development." It is likewise remarked by Dr. Noble, M.R.C.S., "The harmony, indeed, of Gall's physiology with everything that is known of cerebral anatomy is so striking that no one who examines this subject free from bias can fail to recognise it at once. It is really most unfair that Gall and Spurzheim should be so slightly passed over as they are in many modern anatomical works. This proceeding, indeed, has been the besetting sin of anti-phrenological anatomists from Reil

downwards. There have been a few honourable exceptions; but more generally the anatomy has been appropriated without any open and distinct acknowledgment.

To these might be added the names of many other eminent anatomists by whom the harmony between phrenology and anatomy is recognised. But, as it occasionally happens that the *form* of the skull differs from that of the brain, some persons are to be found who contend that these



13.—BRAIN (Under View.)

sciences are opposed to each other, from the fact that the latter shows that it is impossible to ascertain the form of the brain from observation of the skull. This view, however, is only entertained by those whose experience has been confined to *diseased cases*, and by whom the excrescences and contusions which give an uneven thickness to the skull are regarded as *general* rather than as *exceptional*. To the experienced anatomist, it is well known that, in a healthy state, the skull invariably partakes of the form originally assumed by the brain.

It has also been objected that the *frontal sinus* (a hollow or cavity in the skull between the eyebrows) renders it impossible to ascertain the power of the cerebral organs from the external form

of the skull ; but this objection cannot be allowed to apply to the whole of the head, since in no case does the *frontal sinus* extend over more than four or five of the cerebral organs, as those of Individuality, Form, Size, Weight, and Locality. To therefore reject the study of Phrenology would be to take the position so justly denounced by John Locke, who says, "If we will disbelieve everything because we cannot certainly know all things, we shall do much what as wisely as he who would not use his legs, but sit still and perish because he had no wings to fly."

But even the difficulty which the *frontal sinus* appears at first to present may be overcome by making allowance for its presence, and by taking into consideration also the fact that it commences at the age of twelve years, in that part of the skull behind which the organ of Individuality is situated, and gradually increases with age, extending both ways from this point, until, in old age, it reaches over the other organs named above. Phrenologists have also been accused of employing for the use of the mental faculties only two-thirds of the brain, one-third being altogether disregarded, or regarded as functionless. The mistake here is in the supposition that the under part of the brain, which phrenologists do not take into account, is left without functions to perform. That there *are* other faculties besides those classified in the phrenological nomenclature there is not the slightest reason to doubt. From the fact that the organs of such faculties have their seat at the base of the brain, it is inferred that they are not of a very high order ; seeing that the organs of the aspiring faculties are situated in the *upper* part of the brain, while those of an inferior order take a *lower* position. Many who have given their attention to the subject of the mind in connection with the brain have observed manifestations which they have felt convinced were of primitive faculties different from those at present recognised, but have not been able to find organs corresponding to them. It needs not a profound judgment to perceive, in this difficulty, an explanation of the above charge made against phrenologists.

As, too, the movement of every muscle, joint, and limb of the body made in compliance with the will is due to various nerves which terminate in the brain (where each set of nerves has its ganglia), it is very probable that the convolutions at the base of the brain are concerned in directing such movements. As already noticed, that nothing is perceived by either the eye, ear, tongue, nose, &c., *only* from being *connected* with the brain, so it would seem that the external senses *have* cerebral organs. Dr. Spurzheim inclines to this view, for he says that "the brain seems to

be necessary to every kind of perception, even to that of the immediate functions of the external senses." Since all other parts are known to be otherwise occupied, there is no alternative but to suppose that the seat of the cerebral organs of the external senses is at the base of the brain. Their position here renders it impossible for phrenologists to give other information concerning them than that drawn from mere conjecture; but, as this is not the kind of evidence they pride themselves upon, they have very wisely chosen to be silent concerning the functions of those organs hidden from their observation. Hence the above



14.—MRS. MANNING (Selfish Type).



15.—REV. SYDNEY SMITH (Moral Type).

charge. But to consider here every objection that has been started against Phrenology would be to miss the object of the present work. Enough of such objections have already been noticed to show that they originate in an *incomplete consideration* of the subject. This latter circumstance points particularly to the necessity of first investigating the matter, in order to become competent to form a just judgment either of the merits or demerits of Phrenology. With this in view, it will be as well to waive all further preliminary, and turn at once to consider the functions of the cerebral organs or mental faculties.

The faculties of the mind are divided into (1) PROPENSITIES, (2) SENTIMENTS, and (3) INTELLECTUAL FACULTIES.

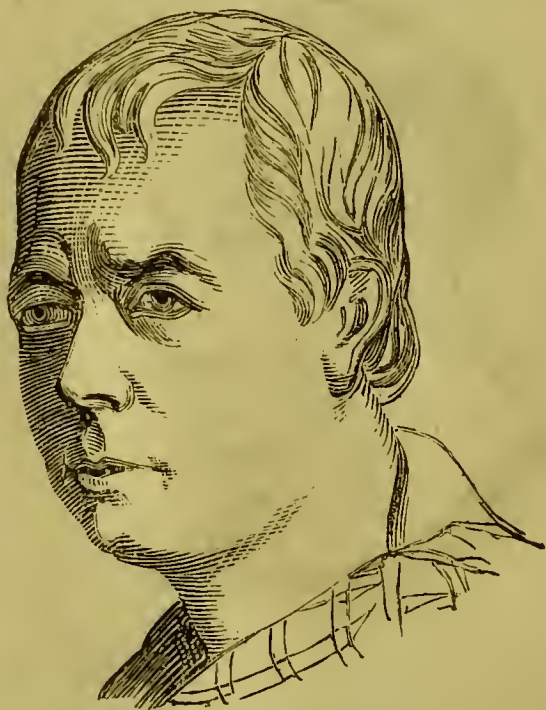
The organs of each of these classes of faculties are not *indiscriminately* interspersed, but occupy distinct regions of the head; the organs of the propensities being situate in the lower part of

the head, those of the sentiments in the upper part, and the organs of the intellectual faculties in the forehead. (See cuts 14, 15, 16.)

The following, numbered from 1 to 9, are the propensities common to both man and animals :—

I. AMATIVENESS. The function of this faculty is to give attachment between the sexes, and is essential to the continuance of the species. A cool reservedness accompanies its deficiency, while persons in whom it is powerful will be fervently devoted to the opposite sex. When not controlled by decency and politeness, this faculty may lead to libertinism and licentiousness. The cerebellum is its organ, which, when large, gives a thickness to the back part of the head near the neck, as in Henry VIII. ; when small, a sparseness, as in Goldsmith. (See cuts 17, 18.)

The sexual instinct was traced to the cerebellum by Dr. Gall ; and though Dr. Spurzheim was led by his experience to consider it as impossible to unite a greater number of proofs to demonstrate any natural truth than may be presented to determine the function of the cerebellum, yet, from experiments made by M. Flourens, at Paris, upon living animals, a different view is now entertained among physiologists concerning the function of the cerebellum.



16.—SIR WALTER SCOTT (Intellectual Type).

Dr. Carpenter says, in his "Cyclopædia of Natural Science," "From experiments upon all classes of vertebrated animals, it has been found that when the cerebellum was removed the power of walking, springing, flying, standing, or maintaining the equilibrium of the body was destroyed. It did not seem that the animal had in any degree lost *voluntary* power over its individual muscles, but it could not combine their actions for any general movement of the body. The *reflex* movements, such as those of respiration, remained unimpaired. When an animal in this state was laid on its back, it could not recover its former posture, but it moved its limbs or fluttered its wings, and evidently was not in a state of stupor. When placed in an erect position it staggered and fell like a drunken man ; not, however, without efforts to maintain its balance." Such experiments it would seem are

considered irreconcilable with the discovery made by Dr. Gall concerning the function of the cerebellum, for Dr. Carpenter continues, "Phrenologists, who attribute a different function to the cerebellum, have attempted to put aside these results, on the ground that the severity of the operation was alone sufficient to produce them; but after a much more severe operation—the removal of the cerebral hemispheres, the cerebrum being left untouched—the animal could stand, walk, fly, maintain its balance, and recover it when disturbed." Although, according to this, it seems indisputable that the cerebellum is concerned with the power of directing and controlling the move-



17.—GOLDSMITH.



18.—HENRY VIII.

ments of the body, still it is doubted that these experiments justify this conclusion. G. H. Lewis, in his "Physiology of Common Life," says on this subject: "It seems to me that there is a misconception of the bearing of experimental evidence in the supposition that injury to an organ, followed by disturbance of a particular function, *proves* that the function in question has its seat in that organ; nothing more than a suspicion can be warranted by such evidence, and, in the present case, the suspicion is proved to be erroneous by the fact that the function can be performed when the organ is absent. Experiment and pathology, if sufficiently examined, distinctly pronounce against the hypothesis." The same authority says, "The experiments of Flourens and Bouland certainly prove that the cerebellum exercises some marked influence on muscular motion."

Admitting, then, that these experiments prove thus much, they need not therefore disprove what has been advanced by Dr. Gall, of the cerebellum being the organ of the sexual instinct. If it

were but now discovered for the first time that the tongue is sensible to bitters, *that* should not shut out the fact that it is the function of the tongue to taste sweets also. That the amative propensity and muscular motion are as much related to each other as sweet and bitter may be known from the fact that all lithesome exercise ends when or soon after copulation begins. The sheep no longer skips and plays; the cat sits immovable and sulky. "How altered is John or James since marriage; he who was all life and action is now so meek and sedate!" is constantly being remarked. The national inactivity of the Turk (who is mostly represented squatting) is undoubtedly a consequence of the seraglio. The cat, if shut up, and not allowed to take its nocturnal rambles, will seek to appease its excited propensity by wriggling on its back and bounding about in all directions. And as by drunkenness, the power of controlling the movements of the body is affected in proportion as the amative propensity is excited, it may be justly inferred that both, though different, are operations of the same faculty. It is, therefore, but natural that they should have been traced to the same organ. And since the continuance of the species is the great end served by this faculty, there can be no impropriety in the name given to it by Dr. Gall.

2. PHILOPROGENITIVENESS. To give the love of offspring, or parental affection, is the function of the organ so called. This propensity seeks to gratify itself in ministering to the wants and needs of the young. It has been supposed to derive its origin from the moral sentiments, but this supposition is refuted by the fact that animals (which have no idea of duty or morality) possess this faculty in as great and sometimes in a greater degree than the human species. Instances confirming this are related in history, where hinds, and even wolves, are said to have nurtured and reared children that had been left by their mothers to be devoured. Henry Fielding, than whom few writers are more conversant with human nature, distinctly points to the selfishness of the feeling in question, thus:—"The tender mother, when terrified with the apprehension that her darling boy is drowned, is struck senseless and almost dead with consternation; but when she is told that little master is safe, and the *Victory* only, with twelve hundred brave men, has gone to the bottom, life and sense again return: maternal fondness enjoys the sudden relief from all its fears, and the general benevolence, which at another time would have deeply felt the dreadful catastrophe, lies fast asleep in her mind."

The absence of such a faculty would render the condition of helpless infancy truly deplorable; and though nothing short of Divine beneficence can be inferred from its distribution, the most

dangerous consequences are to be apprehended from its misapplication. Indulgent parents frequently encourage in their children desires which, though harmless in themselves, tend by degrees to very pernicious habits. It is thus that laziness and intemperance are generated, whose constant attendants are poverty and disease ; out of which grow many vices that lead to bad ends.

“ But poverty with most, who whimper forth
 Their long complaints, is self-inflicted woe ;
 Th’ effect of laziness or sottish waste.”—*Cowper*.

And thus it is to the pampering of children that the greatest part of human misery owes its origin.

3. INHABITIVENESS. This faculty gives attachment to places, such as home and country. It endears to each creature the particular part of the earth which it is by nature constituted to inhabit.

“ And hence the crag,
 Though rough and bare, to its habitant blooms
 Earth’s favoured spot, the garden of the world.”

This feeling is very pathetically displayed in the following lines by Lord Byron :—

“ Sweet scenes of my youth,
 Seat of friendship and truth,
 Where love chased each fast-fleeting year ;
 Loth to leave thee, I mourned,
 For a last look I turned,
 But the spire was scarce seen through a tear.”

4. ADHESIVENESS, OR FRIENDSHIP. It has been denied that this feeling arises from an *innate faculty*, upon the ground that friendships are effected by an affinity of ideas. The futility of this is sufficiently apparent to those who are aware that external circumstances, however favourable, cannot create impressions unless there are internal faculties to receive such impressions. That friendship arises from a fundamental power—a faculty which depends neither upon ideas nor circumstances for its formation—is proved by the fact that the warmest friendships are frequently contracted between persons whose views are quite antagonistic ; and, indeed, between some creatures that have no views at all.

“ What other spirit can it be that prompts
 The gilded summer flies to mix and weave
 Their sports together in the solar beam,
 Or in the gloom of twilight hum their joy ?
 More obviously, the selfsame influence rules
 The feathered kinds ; the fieldfare’s pensive flocks,
 The cawing rooks, and the seamews from afar,
 Hovering above these inland solitudes.”—*Wordsworth*.

From the sentimental flights of some novel-writers concerning friendship, it may seem distasteful to classify this quality of the mind with the animal propensities; but not so when we take the more rational view of its nature as thus expressed by Shakespeare:—

“O world, thy slippery turns! Friends now fast sworn,
Whose double bosoms seem to wear one heart,
Whose hours, whose bed, whose meal, and exercise,
Are still together, who, twin as ’twere, in love
Unseparable, shall within this hour,
On a dissention of a doit, *break out*
To bitterest enmity; so, fellest foes,
Whose passions and whose plots have broke their sleep
To take the one the other, by some chance,
Some trick not worth an egg, shall grow dear friends.”

When it is considered that through this faculty the idle have connections, the voluptuous have companions, the designing have confederates, and the wicked have accomplices, and that many, for their own gratification, would, if possible, have their deceased friends restored to them, though it be to a state of painful suffering, there will be no need to regard it as so very noble a quality. It may appear noble on the part of an animal to grieve at the loss of its keeper; but, if we consider that this proceeds from a sense of its own deprivation, we shall not form a false estimate in concluding that such grief is in its nature strictly selfish, notwithstanding that, in the excess of its grief, the animal may refuse its food and die. Although Byron says of the dog—

“In life the firmest friend,”

that is not to say much for its moral nature; neither is his being

“Foremost to defend”

any great virtue, since it is usual for dogs to quarrel without any provocation whatever.

That virtue, generally understood by the term friendship, which prompts us disinterestedly, and even at self-sacrifice, to make others happy, is very different to the propensity which is gratified in the pleasurable companionship of friends.

It is by this faculty that we are prompted to shun solitude—a state so unfavourable to progress and refinement.

“Man in society is like a flower
Blown in its native bed; ’tis there alone
His faculties, expanded in full bloom,
Shine out; there only reach their proper use.”—*Cowper*.

Whether distinct faculties are necessary, one to attach us to children, another to places, and a third to friends; or whether these attachments are merely different manifestations of one faculty, is a problem which Phrenology renders easy of solution, and which may perhaps be not out of place to consider here.

The founders of Phrenology, during their extensive investigations, were, doubtless, careful to avoid offering even a conjecture upon a point, so important in the study of human nature, without being well supported by a great number of incontestable facts. Probably their early writings abound with the relation of instances of persons who were morbidly attached to their dwelling, though it be but a tub, and who, like Diogenes, have refused proffers of friendship though made by those as great as the Conqueror of the World. Probably, in each case, a marked protuberance was observed in that part of the head now known to be the seat of the organ of Inhabitiveness, whilst the organ of Adhesiveness was defective in development; and the reverse where persons were particularly social, but disregarding of home. Dr. Spurzheim says of Dr. Gall that "at the beginning he confined his observation to men of partial genius; such individuals were indeed most proper, not only because their organs are easily pointed out, but also because these persons alone resist the influence of external circumstances and of education. These individuals are also the most proper for confirming the organs and convincing beginners; and the relation between the development of the cerebral parts and the particular manifestations of the mind is most evident." This mode (though it led Dr. Gall into the error of naming each organ according to its abuse), was necessary to prepare the way for the present more systematised order of the science. But, without admitting the connection between the mind and brain, the fact alone that the avenues of friendship are in some closed to all but the babe, whilst others, like many cats, have no regard but for their home, proves that these are the characteristics of *different* faculties; for if persons became attached to children, places, and friends by means of the *same* faculty, such peculiarities could not be found, but whoever was sensible in one would be equally so in the others.

5. COMBATIVENESS, OR THE DEFENSIVE PROPENSITY. This inspires a boldness to meet and contend with opposition. The freedom of the mind to engage in either a virtuous or vicious cause, which constitutes what is termed "free-will," necessitates a defensive faculty, that each one may preserve his individual rights against the attacks and depredations of those who choose

to abuse this privilege or freedom. The faculty in question supplies this necessity ; quarrelling and contention are the effects of its abuse.

6. DESTRUCTIVENESS. This name may give the idea of a very horrible propensity ; yet it is chosen, for the want of a better, to express that power of the mind which gives the fortitude necessary to give the "kind rebuke," a quality so desirable even to the pastor, that

" He may not spare the harsher part
To probe the ulcer to the heart,
And sternly give the wholesome pain
That brings it back to health again."

Though it is somewhat abused by those who

" Preach the wrath of God from year to year,"

there is often the truest tenderness in well-timed correction ; a schoolmaster could not well fill his office without it, nor

" When other means fail to teach,
Force in learning at the breech."

It is by this faculty that man is enabled to subdue the earth ; for without it lions and tigers would lord it over the land, and we, instead of they, would have been subdued. As it is a faculty beneficently adapted to our nature, we should regard its distribution rather as a blessing, than misjudge it as an evil from the abuses which arise from its misapplication.

" Then say not man's imperfect, heav'n in fault ;
Say, rather, man's as perfect as he ought."

6½. ALIMENTIVENESS. This faculty gives the sense of taste or appetite, by which we are enabled to enjoy the fruits of the earth, and thereby pleurably sustain the body—

" And while but seeming to delight the sense,
Give to the body nutriment and strength."

In those who are naturally indifferent to the pleasures of the table, the organ of Alimentiveness will be found small, giving that lank appearance to the head represented in the portraits of Don Quixote. When the organ is large the head will assume a Sancho Panza-like plumpness, by which we may know the epicure. This faculty, unduly indulged, begets an intemperance that embrates every delicate sense, and gives an offensive coarseness to both mind and body.

7. SECRETIVENESS. By this faculty we are enabled to conceal such of our affairs as due regard to propriety renders necessary not to be revealed. It also gives the instinct to subvert by stratagem the assaults of enemies too powerful to be resisted by force. The same faculty gives the very desirable power of hiding unpleasant emotions, whereby we avoid being offensive to friends, and leave knaves to receive from silence a reproof far more effectual than all the blustering in the world. This faculty sometimes manifests itself in the facility with which some persons can adapt themselves to almost every circumstance, as to revel with revelers, make love with the amorous, pray with the religious, talk



19.—PALMER (Sensual Type).

scandal with slanderers, and assume an air of injured innocence when charged with their dissimulation. It is said that the most easy way to ship a pig is to manœuvre with the animal until you get his snout in a proper direction facing the plank which communicates with the vessel, then take hold of his tail, and pull it hard, as though you wished him to come *from* the place, when, from a spirit of opposition natural in pigs, he will go up the plank without further trouble. This is an instance showing the necessity and advantage of being endowed with the faculty of Secretiveness, which gives that artfulness upon

which alone depends the successful issue of many of our undertakings. An excess of this faculty will sometimes manifest itself in an undue reservedness and evasion, and, where principle is wanting, in lying and stealing. The most prominent part in the head of the fox is that occupied by the organ of this propensity.

8. ACQUISITIVENESS. This faculty, by giving a sense of property and a desire for its possession, prompts to habits of industry and economy, and is most beneficently adapted to our state and nature, since its legitimate exercise induces us to make such provision for the future as may tend to check the undesirable union of that "ill-matched pair, age and want." Avarice arises from its abuse.

"To catch Dame Fortune's golden smile,
Assiduously wait upon her,
And gather gear by every wile
That's justified by honour.

“Not for to hide it in a hedge,
 Not for a train-attendant ;
 But for the glorious privilege
 Of being independent.”—*Burns*.

9. CONSTRUCTIVENESS. This faculty gives the propensity to plan, contrive, &c. It forms an essential element in the character of the builder. Seeing that our constitution requires shelter from cold and rain, we may infer from the possession of such a faculty, and its suitableness to our constitution, that the order of our existence is not merely the result of *blind chance*, but the work of some great conscious Power.

It is related that the Abbé Galiana, remonstrating with some gamblers against their profaneness and atheism, addressed them as follows :—“Let me suppose that one of you gentlemen, who believe that this world is the production of chance, were to go to a gaming-table, and that your adversary were to throw seize-ace once, twice, thrice, four, five, and six times running, our friend Diderot would lose his money. Very well. The game proceeds, and your adversary still goes on throwing his main of seven, and, without variation or interruption, wins every stake. Diderot will now lose his temper as well as his money ; he will swear that the dice are loaded, that the adversary is a blackleg. Ah, Mr. Philosopher ! because the same sides of two dice come uppermost for ten or a dozen times, and you lose a few shillings, you firmly believe that it is caused by a trick, an art, a combination—by, in short, a master swindler and his subservient tools—and yet, seeing in the universe around you millions of millions of combinations, more regular, more difficult, more complicated, and all certain, all beautiful, you never suspect that the dice of nature are loaded ; that there is indeed an art, a combination, and a Master Intelligence above, who regulates the great play by his subservient tools, and confounds the reason and the skill of such short-sighted gamesters as you.”

The preceding form that class of the faculties which blindly incite to actions the end and aim of which are the continuance and preservation of the *animal constitution*, and may therefore be considered not improperly termed the animal propensities. But the object of these faculties is frequently frustrated by their *abuse*. It is well known that no cause could wreck the constitution sooner than the abuse of the first of these faculties ; so with the second—early deaths frequently result from the cares and anxieties arising from an excessive fondness for children. Inhabitiveness also. Persons *morbidly* attached to a certain place will not leave it, though their life depend upon the change ; and, if they do, the misery resulting therefrom frequently ends in death. So with

Adhesiveness. Death caused by an excessive grief from the loss of a departed friend is of very common occurrence. That the broils arising from an undue indulgence of the Combative and Destructive propensities are often fatal is well known; and when the Secretive propensity is allowed the mastery so far as to be appeased by nothing less than treachery, then even hanging becomes acceptable, as was the case with Judas Iscariot; while perverted Acquisitiveness induces the miser at last to starve himself to death.

Thus it is seen that each faculty is good in itself, and becomes baneful only by its abuse. In this respect our faculties may be likened unto fire, which is a very useful element, but, unguarded, it becomes dangerous; and, if allowed to take its own course, will continue to burn until it has entirely consumed the body on which it has taken so great a hold. In this manner we find many of the Commandments of the Scriptures imprinted in our very nature, which makes it not only a matter of faith, but a *matter of fact* that their origin is Divine.

The following, numbered 10, 11, and 12, are the names of the organs of the *self-regarding sentiments*, also common to man and animals.

10. SELF-ESTEEM, OR THE ASPIRING FACULTY. This gives the feeling of self-respect, with a regard for rank, or the position held in society. It inspires a nobleness or dignity by which is maintained—

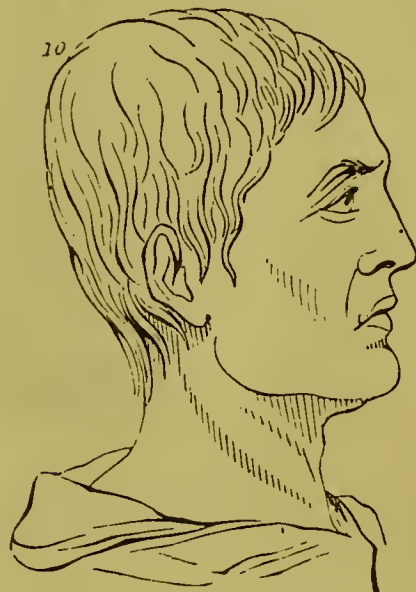
“ The solemn aspect, and the high-born eye,
That checks low mirth, but lacks not courtesy.”

By generating an abhorrence of self-degradation, it frequently restrains from vices which sometimes resist the influence of the moral feelings. The importance of such a faculty may be known from the fact that degeneracy is an inevitable consequence of its want. This being an independent or fundamental faculty, its manifestations need not bear a *relative proportion* to the other faculties. Hence the most accomplished are frequently the least proud; whilst many affect to be so, though they have nothing to be proud of. Persons having Self-esteem in an inordinate degree will pride themselves upon everything, though good at nothing. They will demand silence, suspend the attention, and then deliver themselves of probably the *flattest* speech possible. But however much the proud may, by their pomposity, endeavour to command that respect due alone to true nobility, they seldom receive any better return for their pains than contempt and derision. An instance of this is shown in the following anecdote.

"As Mr. Reynell, a man of some fortune in the neighbourhood of Edinburgh, was one day taking his ride, and being, according to his own idea, a person of no small consequence, he thought proper to show it by riding on the footpath. Meeting a plain, farmer-looking man, he imperiously ordered him to get out of the way. 'Sir,' said the other, 'I don't understand this; I am upon the footpath, where I certainly have a right to walk.' 'Do you know, sir,' said Mr. Reynell, 'to whom you speak?' 'I do not, indeed.' 'Sir, I am Mr. Reynell, of Edinburgh.' 'Well, sir, but that certainly does not entitle you to ride on the footpath, and turn a humble pedestrian off it.' 'Why, sir, I am a trustee of this road.' 'If so, then you are a very bad one.' 'You are a very impudent fellow. Who are you, sir?' 'I am John Duke of Montague.' Hereupon the haughty laird took his stand in the road, and attempted an apology, which is believed to have been somewhat awkward."

In a more humble form, a great degree of Self-esteem is shown, perhaps on both sides, in the following incident.

A pedantic country schoolmaster once asked a sailor what was the third and a half of tenpence. The sailor, who was illiterate, but unwilling to confess his ignorance, evaded giving an answer by saying that he "did not choose to give for nothing that knowledge which had cost him so much trouble and expense to acquire; adding that he could propose a much "harder question than that." The pedagogue, piqued at this, interrogated "What is that?" "Why," said the tar, "if a pound of cheese costs fourpence, how much will a cartload of turnips amount to?"

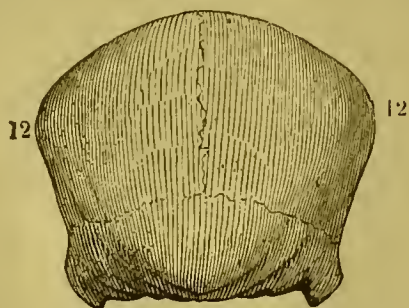


20.—SELF-ESTEEM.

"Though pride may show some nobleness
 When honour's its ally,
 Yet there is such a thing on earth
 As holding heads too high.
 The sweetest bird builds near the ground;
 The loveliest flower springs low;
 And we must stoop to happiness
 If we its worth would know."—*Swain*.

II. LOVE OF APPROBATION. This faculty, though somewhat similar, is distinct, and differs from Self-esteem by impressing upon us that it is not the opinion we entertain of ourselves,

but the opinion entertained of us by *others*, that forms the standard of our honour. Its function is regard of reputation and character. It also gives the sentiment of shame, and thereby constitutes an excellent guard upon both morals and manners. The means employed for the gratification of this faculty are many and various; among them are those attentions and civilities bestowed in the form of courtesy, the exercise of which yields even an ecstatic delight. But though it conduces to these virtues in some persons, yet others (stimulated by the same feeling) may so far demean themselves as to *solicit* praise, although unmerited, and play off the most ignoble parts to win the applause even of the depraved. This, however, is a misapplication of the faculty, which happens only where there is a want of intellect to guide it; which makes good the saying of Pope that "Every man has just as much vanity as he wants understanding." When the exercise of



21.—LARGE CAUTIOUSNESS.



22.—SMALL CAUTIOUSNESS.

this faculty is accompanied by wisdom and morality its legitimate object will be obtained, for then it will give us to feel that we had—

"Better be dead and forgotten than living in shame and dishonour ;"

or that, as Longfellow otherwise says—

"A life of honour and of worth
Has no eternity on earth—
'Tis but a name ;
And yet its glory far exceeds
That base and sensual life which leads
To want and shame."

Ambition, jealousy, and envy take their origin from the faculty Love of Approbation.

12. CAUTIOUSNESS. By this faculty we are disposed to conduct our undertakings with deliberation, and to anticipate danger. There can be no question as to the *necessity* of such a faculty upon consideration of the disadvantages so often incurred through the heedlessness and precipitation resulting from its want. From the apparently *vigilant* nature of this faculty, which, in a manner,

resembles what might be termed the mind's "watch-tower," it would seem to give more than a mere blind or instinctive feeling; but, by due attention to its operations, it will be seen to resemble not so much the "watch-tower" as the less intelligent "bell-buoy" at sea, which alarms at every commotion of the waves, even though the alarm may be needless. The blindness of this feeling is ascertained from the fact that fear is very usually entertained when there is the *least* occasion for it, hence "groundless fears." The function of this faculty is not to "look out," but merely to alarm and put the intellect upon the alert against danger. Melancholy, despondency, and a tendency to suicide are said to proceed from too active a state of the faculty. That anything so rash as suicide should arise from excessive Cautiousness seems both strange and inconsistent. Perhaps it has yet to be known that hypochondria and such states arise from dyspepsia or derangement of the liver. Much of what is called "temporary insanity" and "mental derangement" has its origin in this malady; and which, but for being so often mistaken for madness, and ascribed to the brain, might be successfully cured by change of diet, a little aperient medicine, or by physical exertion, as rowing, gymnastic or dumb-bell exercise. As this matter gets better known it will explain what Dr. Lankester said at the inquest on Townley, who committed suicide in gaol—viz., "That disease of the brain is no guide as to the sanity of persons; for some inmates of lunatic asylums die without disease of the brain, and persons who do not act insanelly have that disease." The desire of Townley to end his existence was no doubt owing to the sedentary nature of his confinement in prison, where, for twelve months, according to his letter published in the newspapers, he employed himself chiefly in reading. Among the literati, perhaps Dr. Johnson stands pre-eminent; a position earned by continued application, even to the exclusion of corporeal exercise: and as spleen is the usual concomitant of such a life, he was naturally of a very splenetic character (See Boswell's "Life of Johnson"). Indeed, the life of nearly every great author affords a similar example. Hugh Miller was so much affected as to fear that his reason was about to forsake him; and rather than live in a state of imbecility he destroyed himself. His writings are regarded as being quite opposed to the idea that his was a cerebral disorder. A gloominess of mind is also exhibited in the works of Oliver Goldsmith, where he asks, "Why have I been introduced into this mortal apartment, to be a spectator of my own misfortunes and the misfortunes of my fellow-creatures? Wherever I turn what a labyrinth of doubt, error, and disappointment appears! Why was

I brought into being? for what purpose made? from whence have I come? whither strayed? or to what region am I hastening? Reason cannot resolve. It lends a ray to show the horrors of my prison, but not a light to guide me to escape them. Ye boasted revelations of the earth, how little do you aid the inquiry!" Such remarks, profound as they seem, furnish to the experienced physician only so many symptoms of inactivity of the liver. In a similar state we find Robert Burns when he writes a letter to his father, in which he says, "My only pleasurable employment is looking backwards and forwards in a moral and religious way. I am quite transported at the thought that ere long, very soon, I shall bid an eternal adieu to all the uneasiness and disquietude of this weary life, for I assure you I am heartily tired of it; and, if I do not very much deceive myself, I could contentedly and gladly resign it." Probably it was this depressed state that led him to entertain the false notion that "Man was made to mourn," but which he acknowledges (in the piece of that title) to be but a one-sided view. A similar notion is also expressed by Shakespeare; but he, after enumerating some of the miseries of human life, very wisely hints that we had better bear the ills we have, bad as they are, than, by any desperate attempt to escape them, fly to others that may be worse. How different the exhilarating effects of hunting or gardening to this ennui resulting from the sedentary habits! Behold one man profoundly sullen and wretched, while another talks with ecstasy of turnips and foxes.

" Say, should the philosophic mind disdain
That good which makes each humbler bosom vain?
Let school-taught pride dissemble all it can,
These little things are great to little man."

It is needless to state the many ways in which a gentleman might otherwise honourably employ himself besides by hazarding his neck at hunting; although he had better do this than nothing, lest the misery which follows should induce him to ascribe the happiness of his poorer neighbours to their less refined condition, instead of to their industry. An illiterate state, no doubt, dooms many to the active life on which depends that cheerfulness which the wealthy vainly endeavour to procure from idleness; but a man may be both merry and wise, learned and happy, when he learns and acts on the principle that labour is indispensable to happiness. The term labour here applies to physical and *not* to mental labour, for over-study and reading are frequently accompanied by indisposition or mental depression. Hence the most beautiful compositions are often cast aside as being of a melancholy character.

“ Oh, idle thought !

In nature there is nothing melancholy.
But some night-wandering man, whose heart was pierced
With the remembrance of a grievous wrong,
Or slow distemper, or neglected love,
And so, poor wretch ! filled all things with himself,
And made all gentle sounds tell back the tale
Of his own sorrows ; he, and such as he,
First named these notes a melancholy strain.”—*S. T. Coleridge*.

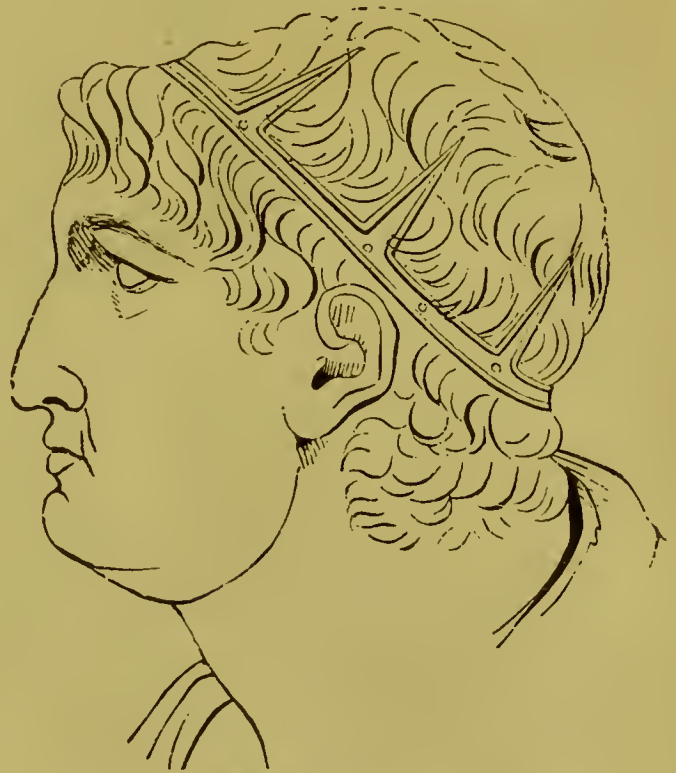
“ The sedentary stretch their lazy length
When custom bids, but no refreshment find,
For none they need ; the languid eye, the cheek
Deserted of its bloom, the flaccid, shrunk,
And withered muscle, and the vapid soul,
Reproach their owner with that want of rest,
To which he forfeits e’en the rest he loves.
Not such the alert and active.”—*Cowper*.

The following, numbered from 13 to 20, are the Moral Faculties, and, with the exception of firmness, are peculiar to man ; and, like the Animal Faculties, give desires that are blind and dependent on the intellect for guidance.

13. BENEVOLENCE is the faculty which induces us to sympathise one with another, and to participate in the joys and sorrows of our fellow-creatures,

“ And share
The inward fragrance of each
other’s heart.”—*Keats*.

Those who pretend that the motives of all human actions may be resolved into the love of ourselves must certainly be unacquainted with the nature of this sentiment ; for what of selfishness can there be in exposing health and life in the fevered chamber or foetid hovel to tend and relieve the sufferings of a stranger—nay, an enemy ? That charitableness which no toil can exhaust, no ingratitude detach, no horror disgust—which suffers and forgives, and which seeks not to display itself, but, like the great laws of Nature, does the work of God silently and in secret—cannot surely be selfish. As every faculty delights



23.—NEKO (Benevolence Small).

in its own exercise, so this of Benevolence gives a pleasure in enacting kindnesses ; but if it is to be accounted selfish because "Virtue is its own reward," or because "He that does most for others does best for himself," it must, notwithstanding, be allowed that the difference between the vicious selfishness of some men and the virtuous selfishness of others is as great as the difference which distinguishes what is base from what is noble.

It must *not* be understood that this "general regard for the feelings of others springs from the *absence* of selfishness," as a distinguished novelist* says it does ; but that it is a *positive feeling*, and, so far from owing its origin to the *absence* of those faculties that are of a selfish nature, it is mostly found in conjunction with them, as instanced by that "cheap charity," "pity without relief," wherewith, as Burns says—

"A man may tak a neibor's part,
Yet hae nae cash to spare him."



24.—VENERATION (Large).

14. VENERATION. The faculty so called gives the tendency to adore without determining the mode or object of adoration ; hence the *various* rites and objects of worship. Besides religious adoration, this faculty will manifest itself in a reverential respect for rank, persons in authority, antiquities, ancient customs, &c. &c. Its want renders the mind insensible to those

emotions that accompany devotional exercises.

It is contended by some that religious worship is the result, *not* of an innate principle of the mind, but of precept or example. This, no doubt, would be a very useful piece of information but for one slight objection—namely, it is not true. Education may *guide*, but it does not *create* feelings ; otherwise it would be possible to teach divinity to cats, monkeys, and other predacious animals.

That the sentiment to venerate does not arise from either reason or revelation is proved by the fact that it is found where neither of these exist. Nearly every explorer has related how that the inhabitants of the most remote parts of the world, however barbarous or savage, practice *some* form of worship. Notwithstanding the absurd and inconsistent ways in which it is sometimes manifested, it is evident that this feeling is both *innate and*

* Disraeli.

universal. The sentiment, then, by which even the most abandoned of us are made to feel an alliance with some power above ourselves has been implanted *within* us. But how are we to reconcile this fact with the idea that "there is no God?" Every other faculty of the mind has its external correspondent. Benevolence has its response in the helpless and distressed. Dangers and a faculty to guard against them co-exist; but is the faculty of Veneration an exception to this rule, and given but to mock us? Is it possible to entertain such an impious thought of that benign Power who

"Does *pleasure* mix
With each sensation, though for Nature's use
But little needed."

Surely it needs not the evidence of the Scriptures to convince us that it is the fool that says, "There is no God."

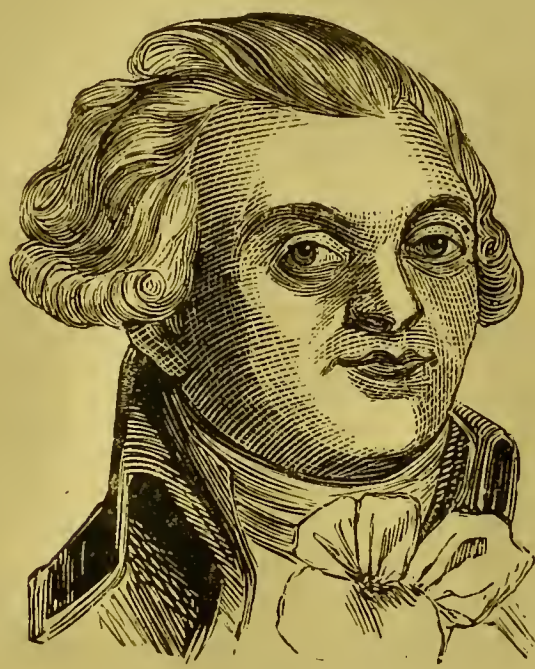
The case is not a whit altered by any doubt that may be entertained with regard to the truth of Phrenology, since, independent of its organ, the faculty is known to exist by its effects; for just as societies prove a social faculty, so churches, temples, and mosques prove a religious faculty: and, therefore, as every faculty has its outward correspondent, the rudest idol that was ever hewn furnishes evidence that there is a God.



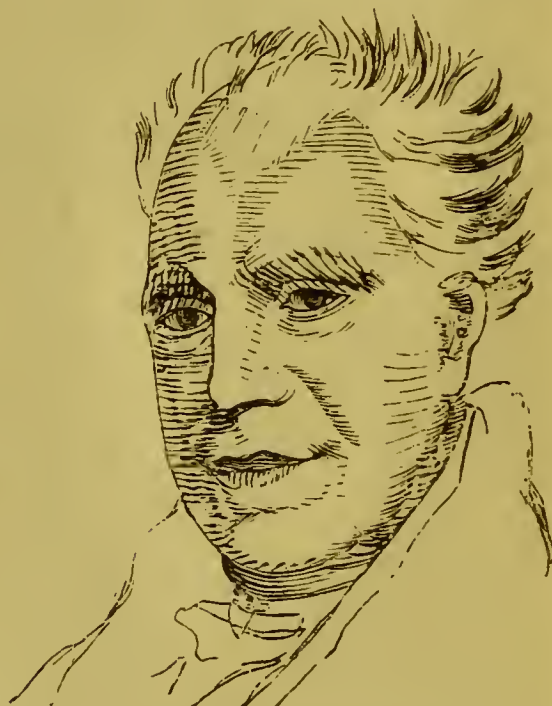
25.—FIRMNESS (Large).

15. FIRMNESS. It has been the object of the different propounders of Phrenology to nominate the organs of the mental faculties by terms suitable to express their functions. This method has in many instances been so successfully employed as to render definition often difficult and sometimes unnecessary. This is particularly the case with regard to firmness. It will, therefore, be so much rhodomontade to attempt to explain with "much ado" what may be sufficiently well expressed in a single word. However, not so much with a view to "paint the lily" or "gild refined gold," as to follow the order of giving some useful hint in connection with the enumeration of each faculty, it will be necessary to give more than the mere name of this faculty to explain its use and abuse. Firmness, then, gives those qualities known as patience and fortitude; and is necessary for the accom-

plishment of such objects and undertakings as are beset with difficulties, as it gives to the mind a fixity of purpose which increases in proportion as it is opposed. It is indispensable to all rulers, as it enables them to administer *unswervingly* the law. Without Firmness it would be impossible to sustain that gravity and self-command so necessary in the training of children; consequently it forms an essential element in the character of those having the guardianship of the juvenile world. Yet by none could the faculty of Firmness be misemployed with more dangerous consequences than by the schoolmaster, who should be inflexible, not



26.—ROBESPIERRE (Region of Moral Organs Low).



27.—RLV. GEORGE CRABBE (Moral Type).

in the use of one common mode of treatment for every scholar, but in the employment of various means to suit the various minds under his charge; otherwise "natural dulness" will be augmented rather than dispersed.

Stubbornness arises from the abuse of Firmness. When we consider that such a quality takes its origin from the same source as patience, which gives submission and endurance in suffering, we may understand how it is that the tyrant and slave are found in the same individual, or how it is that the most servile under subjection are the most despotic when in power.

16. CONSCIENTIOUSNESS. This faculty prompts to an observance of that line of conduct which the intellectual powers have been trained to regard as dutiful and just. The nature of this faculty is beautifully described by William Hamilton Drummond, thus—

“Conscience, vice-regent of th’ Omnipotent,
 The witness of His being, justice, power ;
 The avenger of His violated laws ;
 Of good the minister, of love Divine
 The sacred oracle, approving right,
 And aye denouncing wrong with still small voice ;
 Small, yet more potent than the storm which rends
 The rocks asunder, for that voice is God’s.”

Different writers on moral philosophy vary in their opinions with regard to the sentiment of justice, some believing that it is an innate principle, others, that it is not. Many are led to the latter conclusion by the prevalence of vice, which they think would not be so general if there was an internal admonisher. This view has its votaries chiefly among those who overlook the fact that many wrongs are committed in ignorance of what is right, and not altogether from an absence of Conscientiousness ; for it should ever be remembered that “Justice is blind.” Even among ranks above the lowest, there are thousands so misinformed in the ways of honest principle as to be constantly deceiving themselves with the idea that there is no sin in communicating a falsehood if it can be done without making the tongue guilty of an untruth. This is managed by means of equivocation, which, says Fielding, “hath quieted the conscience of many a notable deceiver.” But when a man does what he feels to be an unjust deed, he is sure, sooner or latter, to reproach himself for it. This self-reproach will be more or less urgent, in proportion to the activity of the faculty of Conscientiousness. Many have been led to err in their premises concerning the source of this sentiment through not being aware that it frequently reigns with the greatest power where the conduct least confirms its presence : for, after once quitting the path of rectitude, some will feel too guilty to return to it ; and to engage themselves from the horrors of their own reflections, they (as if accursed) seek a refuge in crime, which they feel less terrible than the torture of a bad conscience.

“’Tis ever thus
 With noble minds, if chance they slide to folly ;
 Remorse stings deeper, and relentless conscience
 Pours more of gall in the bitter cup
 Of their severe repentance.”—*Mason*.

Since then no

“Exile from himself can flee,”

it should ever be our especial care to observe strictly the dictates of that

“ Still small voice within.”

“ Its slightest touches instant pause—
Debar a' side pretences ;
And resolutely keep its laws,
Uncaring consequences.”—*BURNS*.

Repentance, which alone can mitigate the sorrows of remorse, and make acceptable that remission so joyful to the penitent, is also a consequence of the faculty of Conscientiousness.

“ And kind Nature thus,
Bounteous in all, supplies the wants she makes.”

It also gives the sentiment of gratitude, and a tendency to regard everything as flowing from a Divine Providence. But where the mind is unenlightened, every ailment or accident is likely to be viewed as an unjust visitation from God. Than this, perhaps, no form of impiety could be more shocking ; and, therefore, as its suppression can be effected only by a proper exposition of the principles upon which life and health depend, nothing could be more desirable (irrespective of its other advantages) than that this branch of natural science should become a subject of study in the education of youth. An occasional lesson in physiology might well take the place of those mythical legends which are often frivolous and indelicate, and at best unfit to be taught in schools.

17. HOPE. This faculty produces a tendency to anticipate the realisation of whatever the operations of our faculties lead us to desire ; and, by giving an appearance of cheerfulness to the most dreary prospects, it encourages to endeavours whereby much is accomplished that appeared impossible. Thus, as Carlyle says, “ From the lowest depth, it forms a path to the loftiest height.” It also renders even precariousness pleasurable, and so most aptly fits us for the hazards and uncertainties of life. Yet, from the almost insufferable miseries which generally attend the *disappointment* of its aspirations, it would seem that Hope is misplaced when centred in the objects of this world. Perhaps such had been the experience of the poet who said,

“ Even could the hand of Avarice save
Its gilded baubles till the grave
Reclaimed its prey,
Let none on such poor hopes rely,
Life like an empty dream flits by,
And where are they ?”

Even when we attain our ends, the dull and empty pleasure of

possession, as compared with the joy of anticipation, argues strongly that Hope has its proper object in nothing short of a blissful eternity. This view is thus very forcibly couched by Dr. Young:—

“When blind Ambition quite mistakes her road,
And downward pores for that which shines above—
Substantial happiness and true renown—
Then, like an idiot gazing on the brook,
We leap at stars, and fasten in the mud;
At glory grasp, and sink in infamy.”

The author of the “Vestiges of the Natural History of Creation” admits, not only that our moral faculties “connect us with the things that are not of this world,” but he says, “the existence of faculties having a regard to such things is a good evidence that such things exist.” Unless nothing certain can be deduced from reason, a deduction so logical must needs represent to the most sceptical mind that

“Heaven’s promise dormant lies in human hope.”

Since, then, this promise of immortality is, as it were, *inscribed* in our nature, and by no less than the hand of He

“Who gave beginning, [and] can exclude an end,”

can we possibly believe that this Hope is a mere phantom, and, as some would have us believe, intended but to allure us to dissolution? Had only our *existence*, and not also our happiness, been desired, our faculties need not have been so many sources of pleasure. Life could have been sustained with tasteless or unsavoury food; sweet odours and musical sounds would not be absolutely necessary; and we might have groped about in darkness without thereby bringing our existence to a termination. But the present order of things is so contrary to all this that there is no man, in his right mind, but would consider the loss of any one of his senses as the greatest calamity possible. Can it be believed then, that He who has arranged all these things for our pleasure will forsake us in “the things which concern the relation of us, His humble creatures, towards Him?”

“Were then capacities Divine conferred,
As a mock diadem, in savage sport,
Rank insult of our pompous poverty,
Which reaps but pain from seeming claims so fair?

* * * * *

Immortality alone can solve
That darkest of enigmas, human hope;
Of all the darkest if at death we die.”—*Dr. Young.*

“Then, brethren, let us not complain
 That Heaven’s unjust, when we sustain
 Th’ allotted term of care and pain.
 Our life in such a mould is cast,
 ’Tis plain it is not made to last,
 ’Tis but a state of trial here,
 To fit us for a purer sphere ;
 A scene of contest for a prize
 That in another region lies,
 In better worlds and brighter skies ;
 Here doom’d a painful lot to bear,
 Our happiness is treasured there.”—

“*Dr. Syntax in Search of the Picturesque.*”

18. WONDER. This faculty gives the sentiment of faith, without determining what principles should be embraced. It renders acceptable whatever has reference to the supernatural or romantic—such being most grateful when most extravagant. The feeling is thus beautifully expressed by Longfellow—

“It is but a legend, I know,
 A fable, a phantom, a show,
 Of the ancient Rabbinical lore ;
 Yet the old mediæval tradition,
 The beautiful strange superstition,
 But haunts me and holds me the more.”

There is probably no other faculty whose manifestations are more various and apparently opposite in their nature ; for whilst, under moral influence, it forms an element in religious faith, and derives consolation from belief in Divine Providence, yet, influenced by atheistical notions, it seeks gratification in the *belief* that the universe is not a system, and is without a Ruler—a *belief* requiring a far greater amount of credulity than is necessary for the appreciation of the most extravagant legend that was ever penned. For no man *really* sceptical would allow it to be imposed upon him that the order and regularity which everywhere abound are the effects of mere chance. Neither would he reconcile himself to any theory which pretended to account for such order by any means short of law itself. And, if he possesses the least particle of reason, he will be able to understand that “a law presupposes an agent, for it is only the mode according to which an agent proceeds ; it implies a power, for it is the order according to which that power acts. Without this agent, without this power, which are both distinct from itself, the *law* does nothing, is nothing.*

Whilst the philosopher has been inventing terms for the purpose of classifying his observations upon the different operations of Nature, the unthinking have claimed these *terms* to *explain* the

* See Paley’s “Natural Theology.”

cause of the phenomena or processes which they were only intended to *designate*.

While the atheist fancies that he knows the causes and comprehends the economy of the universe, and talks fluently of the powers of gravitation, repulsion, evaporation, organisation, and so forth, he seems not to be aware that he is but amusing himself with mere terms, and that these express no *causes*, but are the *names* of general phenomena, and give us just as much information respecting the origin or cause of the universe and its organised forms as if we were to ascribe the construction of a watch to a power of "chronometrification." * The error of assigning a name to a fact to explain its cause at last became so flagrant that the atheist has abandoned this method; and now, to exclude the intervention of an intelligent author, he ascribes the wise arrangement of the universe to "necessity," an hypothesis which for absurdity exceeds even that which pretended to attribute everything to "chance."

If we are to believe that the mighty wonders which everywhere surround us have been called into existence by the *necessity* for them, it seems strange that an inexhaustible pocketful of money has not sprung up at our sides, considering the very great necessity for the same. Perhaps such a thing is *developing itself*. But the idea is inconsistent with the fact that many things minister to our comfort for which there is *no actual necessity*. It has a refutation in the flowers that deck the fields; for though they afford delight to several senses, yet their existence cannot be traced to any *necessity* for them.

"Not worlds on worlds, in phalanx deep,
Need we to prove a God is here;
The daisy, fresh from Nature's sleep,
Tells of His hand in lines as clear.

"For who but He who arched the skies,
And pours the day-spring's living flood,
Wondrous alike in all He tries,
Could raise the daisy's purple bud—

"Mould its green cup, its wiry stem,
Its fringed border nicely spin,
And cut the gold-embossed gem,
That's set in silver gleams within;

"And fling it unrestrained and free,
O'er hill, and dale and desert sod;
That man where'er he walks may see
In every step the stamp of God?"

* Crombie's "Natural Theology."

The advantage of this faculty (Faith), under religious direction, is most eloquently described by the Rev. Alexander Crombie, as follows:—"The man who begs his bread from door to door, and knows not where at night to lay his head, but believes in the existence of a superintending Providence, assured that no evil can befall him without His permission, that his sufferings are wisely designed for his benefit, and if borne with resignation will terminate in his good, is far less an object of compassion than the atheist 'clothed with purple, and faring sumptuously every day,' who, when the hour of affliction comes, has neither the conviction of a Providence to soothe his sufferings, nor a beam of hope



28.—BUNYAN.



29.—THOMAS PAINE.

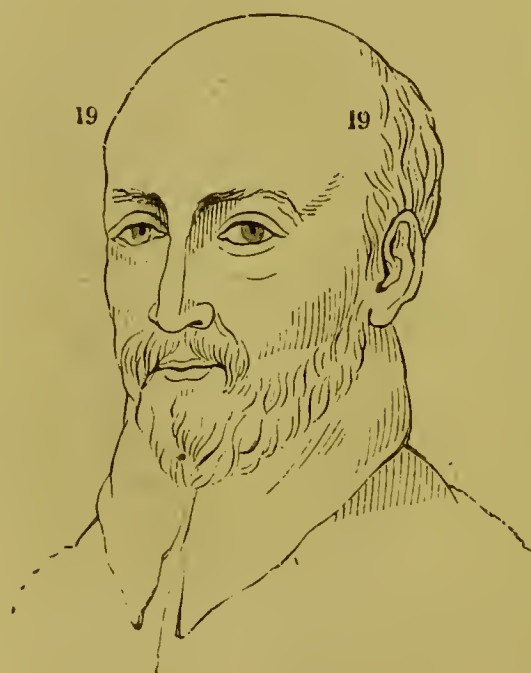
beyond the grave; and who, in the day of prosperity is visited with the anticipation that death will come soon, and may come suddenly, to annihilate all his pleasure, and consign him to dark oblivion and everlasting insensibility."

The same author also says, "To deny that a belief in God, a faith in Providence, and the hope of immortality serve to alleviate the pain and soothe the anguish of affliction, is to insult our reason and contradict our experience."

"The owlet Atheism,
Sailing on obscure wings across the noon,
Drops his blue-fringed lids, and shuts them close,
And hooting at the glorious sun in heaven,
Cries out, 'Where is it?'"—*S. T. Coleridge.*

"The steps of Faith
Fall on the seeming void, and find
The rock beneath."—*Whittier.*

19. IDEALITY. "Beauty," says W. Ellery Channing, "is an all-pervading presence. It unfolds itself in the numberless flowers of spring ; it waves in the branches of the trees and the green blades of grass ; it haunts the depths of the earth and the sea, and gleams out in the shell and the precious stone. And not only these minute objects, but the ocean, the mountains, the clouds, the heavens, the stars, the rising and setting sun—all overflow with beauty." This beauty with which Nature and the universe generally is arrayed would have been lost to us but for the faculty of Ideality. It is to this faculty that we owe our sense of the beautiful, which gives also the love of poetry, painting, sculpture, and such of the fine arts as tend to refine and elevate the mind. It is in effect like the sun, which gilds and beautifies all that it shines upon ; and an infinite joy is lost to those who neglect to cultivate this "Divine sentiment." This faculty, however, is misused when, by an excessive delicacy, we allow ourselves to recoil from the tattered beggar, whose demeanour is not congenial with our own notions of elegance. Perhaps it would be well to remember that the faculty of Ideality dwells in all ranks ; and that, as Mrs. Stowe says, "There are many of the poor who have a keen sense of the beautiful, which rusts and dies within them, because they are too hard-pressed to procure it any gratification." Ideality, like the other faculties of the emotional class, is in its nature *blind* ; hence it is that what appears beautiful to some appears loathsome to others. The knowledge of this may explain the difficulty under which many have laboured in attempting to define what constitutes "taste."



30.—TASSO (Poetical Type).

20. WIT. Various opinions are entertained by the different propounders of Phrenology concerning the function of this faculty. Some believe it to give the perception of congruity and incongruity of ideas, and under this impression they consider it to belong to the intellectual class of faculties. This view may agree with the general acceptance of the term "wit," as signifying discernment or quickness of thought ; but others contend that the faculty called Wit gives merely the *sense* of the humorous,

and therefore they classify it with the emotional faculties, whence it claims relationship with Ideality, and thereby shows that the sublime and the ridiculous are somewhat allied, though seemingly so opposite. This will be more apparent when it is considered that much that is witty is so only when contrasted with what is beautiful; the humour of which is lost to those who lack the sense of the beautiful. It being the nature of this faculty to give the *sense* and not the *perception* of the humorous, it will be readily understood that a person may be able to appreciate wit without being himself a wit; these qualities being as distinct as is the operation of making spectacles and that of looking through them after they are made. To discover the



31.—BARTHELEMY (Infidel, Revolutionist, and Murderer).



32.—WORDSWORTH (Poet).

relation of ideas, or to detect an agreement in ideas where they appear to dissent, is an art requiring the aid of several faculties; and it is then, through the faculty of wit that we become sensible to any absurdity that may make its appearance. Hence the witty remarks ascribed to Hodge and Podge are invariably the product of an intelligent author. It is related that a Scotch parson, at the time of "The Rump," said in his prayer, "Lord, bless the Grand Council, the Parliament; and grant that they may a' hang together." A country fellow, standing by, said, "Yes; the sooner the better; and I am sure it is the prayer of all good people." "But, friends," said the doctor, "I don't mean as that fellow means, but pray that they may a' hang together in accord and concord." "No matter what cord," said the other, "if it be but a strong cord." Of course, every sensible person must know that this is too good to have happened but in theory. When a witty remark is made by a dull person, it mostly escapes

unobserved by its blunt author. A lion-faced showman, telling his experience on first setting up in Scotland, where he thought his ruin was certain, said : "The Scotch people stood considering outside the 'show' for hours together, and at the same time they kept turning their money over and over in their hands so much that when at last they paid their penny it was actually *hot*." This he told in a very savage mood, and appeared quite indignant at the laughter created by his remark ; evidently not knowing that it contained more than the relation of a sorry experience. That "it takes a wise man to make a fool" (or to be witty, as it should be said), seems to have been noticed by Sydney Smith, for he says : "I believe the fact to be that wit is very seldom the only eminent quality which resides in the mind of man ; it is commonly accompanied by many other talents of every description, and ought to be considered as a strong evidence of a fertile and superior understanding. Almost all the great poets, orators, and statesmen of all times have been witty. Cæsar, Alexander, Aristotle, Socrates, Solon, Demosthenes, and Cicero were witty men ; so were Lord Bacon, Shakespeare, Descartes, Jonson, Boileau, Fontenelle, Waller, Cowley, Dr. Johnson, and almost every man who has made a distinguished figure in the House of Commons." Wit, though often decried, has done much good by way of correcting error, checking awkwardness, subduing hauteur, soothing sorrow, teaching age and care to smile, and by alleviating even the griefs of the disconsolate. Indeed, the beneficial effects of wit are so numerous that it might be thought impossible to possess this power in too great a degree, but this is not the case, for it becomes an evil when allowed to interfere with the legitimate exercise of our other faculties, particularly when, instead of pleasantness, it excites but hatred and contempt. It is recorded of George Penn Johnson, one of the most eloquent "stump-orators" in America, and who loved a joke too well to let slip an opportunity, that when addressing a meeting where it was a great point to gain the Irish vote, after alluding to the usefulness of the Irish community in the most flattering terms, he said : "Who



33.—WIT (Large).

dig our canals?—Irishmen. Who make our railroads?—Irishmen (applause). Who build our gaols?—Irishmen (great applause). And who fill them?—Irishmen.” Though this remark did not bring down the house, it did the Irish, in a rush for the stand; but Johnson did not wait to receive them. This, if true, is an instance of a man who sacrifices the opportunity of holding one of the highest positions in society to an irrepressible love of humour. Hence, as Sydney Smith says, “When wit is combined with sense and information; when it is softened by benevolence, and restrained by strong principles; when it is in the hands of a man who can use it and despise it, who can be witty, and something

much better than witty; who loves honour, justice, decency, good-nature, morality, and religion ten thousand times better than wit; *wit is then a beautiful and delightful part of our nature.*”



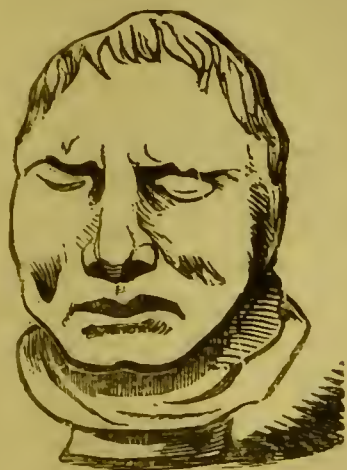
34.—CERVANTES (Author of “Don Quixote”).

21. IMITATION is said to be a faculty the purpose of which is to “enable the young to learn from the more advanced, and keep a convenient uniformity in the manners and externals of society.” But it may be questioned whether this seeming conformity of conduct is the result of example, and, therefore, of a primitive faculty to imitate, or not more particularly the effect

of the several faculties we possess in common with each other. In the practice of the imitative arts, such as painting, gesticulating, &c., various faculties are employed, and the pleasure derived from the exercise of these several faculties would of itself give the impulse to imitate without a distinct or primitive faculty to do so.

The organ of the supposed faculty of Imitation, to which most writers on Phrenology have traced the mocking propensity, is said to be in the upper part or coronal region of the head. That the propensity to feign or mimic may be traced to a fundamental faculty there can be no reason to doubt, but that the organ of such a propensity has its place among those of the moral sentiments is altogether inconsistent with that regularity or order which is observable in the others, notwithstanding it has been prettily observed to be well placed in that region of the head called “The Poet’s Corner,” from being occupied by the organs of those faculties which

give perfection in the "dramatic art," namely, Ideality, Wonder, Wit, Time, and Tune. That a fulness should be found in that part of the head said to be occupied by the supposed organ of Imitation is very natural, since its position here is between two which are indispensable in good acting, viz., Benevolence, to act with feeling any sympathetic part; and Wonder, to enable the actor to accredit himself with being in reality the persons whose characters he but affects. When this circumstance is considered, it will, of course, appear excusable on the part of Dr. Gall for having fallen into the error of supposing the power of imitating to originate from a primary faculty, especially as

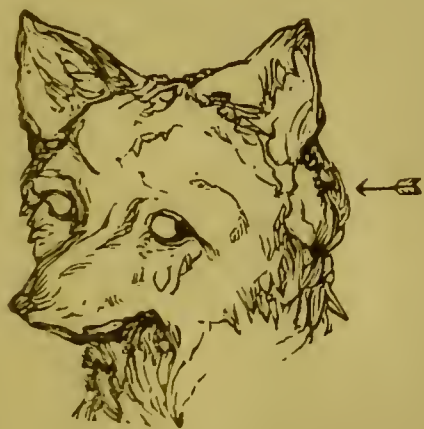


35.—MRS. HILLINGS, AN IDIOT (Non-intellectual).

his observations in this particular have been sanctioned by many talented persons who have since taken up this branch of study. It is hoped to be understood that these comments have been made from no want of respect for the discoveries of Dr. Gall, but rather because truth in such matters is too important to be thrust aside out of respect either of persons or opinions. But whether such a faculty as Imitation does or does not exist, we have the



36.—MONKEY.



37.—FOX.

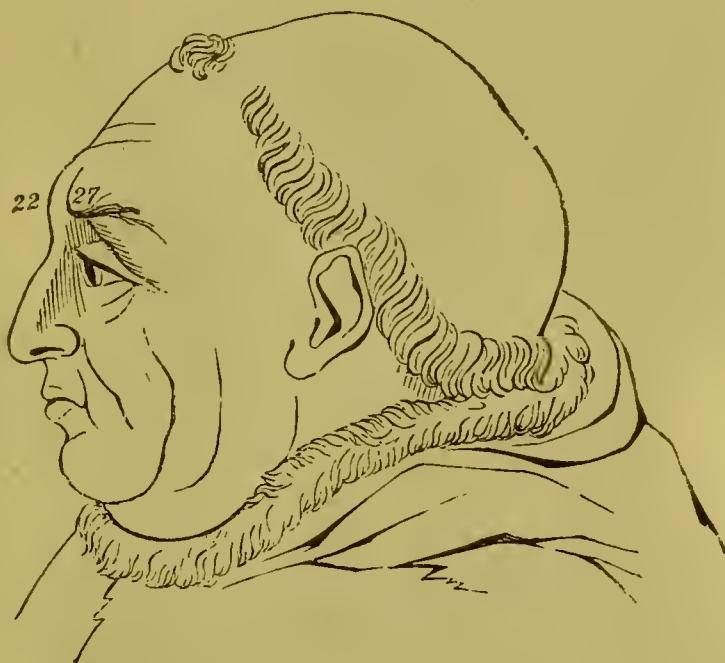
most conclusive evidence that its organ is *not at the upper part of the head*, in the fact that this part is not only deficient, but entirely *wanting*, in those animals which are noted for their power of mimicry, such as the fox and the monkey. That the fox is a good actor is unquestionable, from the fact that it has been known to feign death so well as to be taken up for dead; but when thrown out it has proved to be living and well, by instantly making off with all possible

speed. Since this power of acting in secret or incognito seems to

predominate where there is most cunning, it will be but reasonable to suspect that it is but a phase of Secretiveness ; and if such should be the case, it is not to be wondered that phrenologists have been deceived by it, for the best judges may be deceived by the cunning.

The following are the Intellectual Faculties, those numbered from 22 to 33 being of the *perceptive* or *observing* order, through which, by means of the external senses,* man and animals are brought in communication with the external or physical world. The organs of the intellectual faculties occupy the forehead.

22. INDIVIDUALITY. The organ so called is situated in the



38.



39.—GALILEO (Intellectual).

centre and lower part of the forehead. The annexed cut shows the situation, immediately above the nose. At this part occurs the *frontal sinus*, which is a hollow space in the skull. A development of this organ should therefore be indicated by a *marked* prominence, to allow for the said *sinus*.

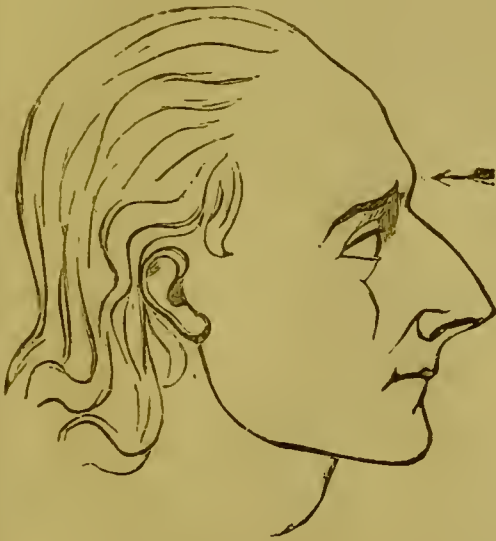
The perception of objects has by every phrenologist been ascribed to this organ as its function ; and though its development is invariably accompanied by great acuteness of discernment, yet, for reasons which will appear in the consideration of the other perceptive faculties, it will be seen that such is rather the function of *several* faculties, and not of one in particular.

The writer has by his experience been led to suspect that its function furnishes the physiognomic instinct, or perception of character. (See page 85.)

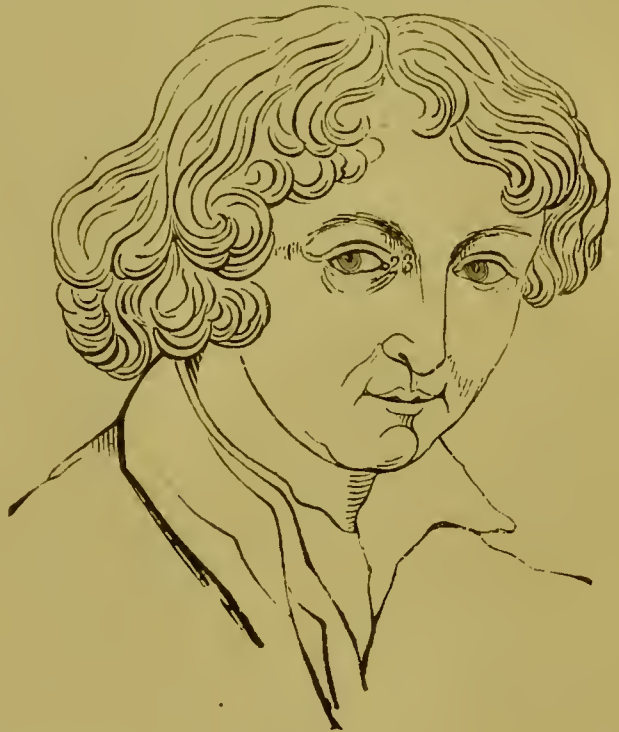
* Seeing, hearing, smelling, tasting, and feeling.

The organ is large in Lavater and others noted for their power of discerning the thoughts and feelings of others.

23. FORM. That there is an internal faculty which gives the perception of *configuration* distinct from the senses of seeing and touch (which merely convey the impressions of form) is proved by the fact that such a power is never found in proportion with correctness of vision nor with delicacy of touch. But that this perception of form *is* the function of a faculty different to that by which objects are distinguished seems doubtful, since it is by their



40.—LAVATER (Physiognomist.)



41.—VANDYKE.

configuration that all objects are known. That the power of distinguishing forms and that of distinguishing objects should have been traced to different sources, or faculties, seems altogether unaccountable, when it is considered how evidently the one is but a developed state of the other; just as running is a more active function of the legs than walking.

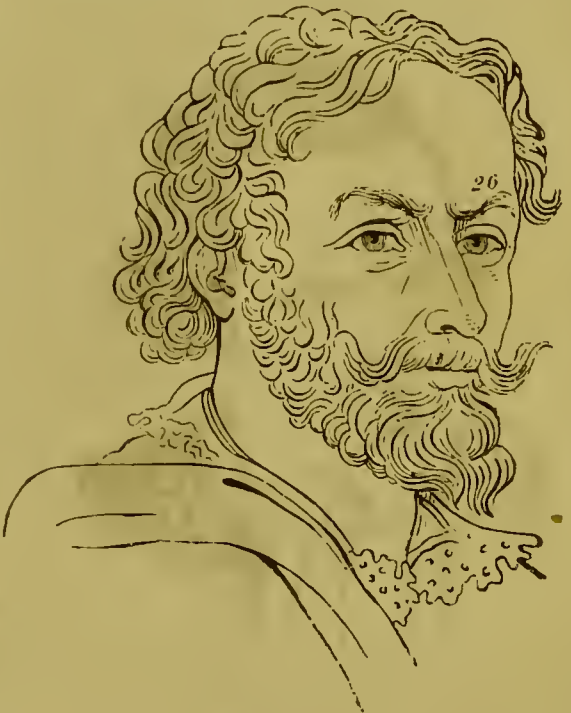
With a view, probably, to show that the perception of form and the perception of objects are powers originating from distinct faculties, it is said, in "Chambers's Information for the People," on the subject of Phrenology, that "Individuality takes cognizance of individual existence—of a horse, for example. Other faculties respectively observe the form, size, and colour of the horse, *but a faculty was necessary to unite all these, and give the individual idea of a horse.*" Here, however, a power of the mind is traced to one faculty, which is furnished rather by the combined action of several faculties. This is probably owing to

an oversight of the fact that the joint operation of several faculties produces manifestations that appear different to their individual operation, just as a green colour is produced by mixing yellow with blue. Such manifestations are often considered to result from a distinct or additional faculty, hence the above mistake. Nor is the matter mended by representing that "Individuality furnishes the substratum which has form, size, &c.;" for, as *substance* is cognizable, only by such qualities as form, size, weight, colour, &c., it seems but absurd to talk of a faculty which gives the notion of the existence of *substance* apart from these qualities.

24. SIZE. Dimension is a quality belonging to every object that exists. Dr. Spurzheim very justly contends that this quality is perceived through a faculty distinct from that which gives the perception of configuration, on the ground that the perception of form and the perception of size are found to exist in different degrees in the same individual. "An artist," he says, "may have made a form, and when you look at it you will see there is no proportion." The importance of this faculty is best seen in its absence, where it would be impossible to distinguish a lobster from a shrimp, and other objects where the specific difference is known by size alone. From this it will be seen how incomplete would be our knowledge of objects without such a faculty; and also that it is through several elementary faculties, rather than a special faculty, that we perceive objects. The faculty of Size gives also the idea of space, and is very important to our movements, as without it we should find some difficulty in directing food to the mouth, as some people do who, when this faculty is deranged from intoxication, pour their wine up the nose instead of down the throat.

25. WEIGHT. This faculty gives the perception of that quality of matter which constitutes its gravitating tendency, namely, its weight or density, and which is quite distinct from its other qualities. This faculty is of great moment in preserving the equilibrium of the body. "A man," says Paley, "is seldom conscious of his voluntary powers in keeping himself upon his legs. A child learning to walk is the greatest posture-master in the world; but art, if it may be so called, sinks into habit, and he is soon able to poise himself in a great variety of attitudes, without being sensible either of caution or effort." But it should not be inferred that this perception of the law of gravitation is not innate, because children cannot balance themselves immediately they are put upon their feet; the fact is, they have not sufficient strength in their limbs to support themselves, whilst

their sense of danger is made known by the cries they invariably set up on being left unsupported, which proves they have this perception, and therefore its faculty. The manner in which children cling to whatever they can get hold of almost as soon as they are born, as if sensible of the danger of falling, is a clear proof that the faculty of Weight is *innate*; as also that of the chicken running about as soon as it is hatched from the egg. But the function of this faculty does not end in merely balancing the body; for, by perceiving the nature and density of bodies, it furnishes the notion of the manipulation necessary to convert them into useful forms. Hence it is to this faculty that the sculptor, in part, owes his art of giving to the shapeless block a living form. To performers on musical instruments the faculty of Weight is indispensable, particularly when the proper sound of a note depends on the manner of touch or pressure; in short, it is the faculty of *mechanics*, and it would be impossible to name a mechanical pursuit in which the faculty of Weight is not more or less employed.



42. — RUBENS.

26. COLOUR. Though it is feasible to believe that those who have been blind from birth can have no conception of colours, yet it would be wrong to infer from this that the perception of colour is a *consequence of sight*, for it is usual for persons with the most perfect vision to be incapable of distinguishing but light from dark colours. This fact clearly demonstrates that colour is perceived, not *by* the eye, but *through* the eye—just as distant objects are seen, not *by* the telescope, but through it—and, therefore, that the perception of colour is the function of an internal faculty, having the eye but for its medium. The faculty gives merely the perception of colour. To perceive what may be *harmonious* in the arrangement of colours will depend upon the fancy, which will be found as variable as the wind, even in the same individual.

27. LOCALITY. This is the geographical faculty. Its function is to observe the position of objects. Locality and Size were originally regarded as one, as also their organs; but the fact did

not remain long concealed from the deep penetration of Dr. Spurzheim that these were distinct faculties. By him they were as such finally adjudged; the soundness of which judgment will readily appear to every one possessing the least acumen for such minutiae. Some persons have the faculty of Locality in so weak a degree as to be continually losing themselves. To those possessing it in a strong degree, it, like the mariner's compass, serves as an indicator by means of which they never lose sight of their latitude.

It will be remembered by those who have read Captain Cook's "Voyages Around the World," that his leading characteristic was that of observing places. Coinciding with this, his portraits represent him with the organ of Locality remarkably prominent.



43.—CAPT. COOK.

28. NUMBER. This faculty gives the perception of the power and relation of numbers. On this principle depends the art of forming mathematical computations. Its most simple function is to distinguish few from many.

It is maintained by some that this faculty is peculiar to man, and that animals are devoid of it; but as, by their uneasiness at the time, both cats and dogs seem to know when any of their young ones are taken from the litter, it would seem that such an idea is opposed by such a fact. To avert this, it is said that animals may miss any of their young ones, not from any knowledge of numbers, but from their power of distinguishing individuals. This is but a presumptive sort of evidence, and is quite overthrown by a fact related among Chambers's "Anecdotes of Dogs," of a dog being able to play at dominoes. This it could do so well as frequently to win the game, and would shake its head and bark when it had not a domino to tally in number to that made by its adversary. This is recorded as true, and should serve at least to decide that animals have the faculty of Number.

Arithmetic, or the art of numbering, from being almost unknown to those whose pursuits or mode of living render it unnecessary or useless, might be thought to be acquired by precept, rather than as resulting from a natural faculty of the mind. It may reasonably be contended, however, that no precept could

make an impression on the mind, without an internal faculty to receive such impression. The most vivid description of colours, and of the effect of their admixture one with another, would be as meaningless to the blind, who had never perceived colours, as to a lamp-post. Precept, therefore, does not convey an idea of such qualities, where there is no faculty to perceive them.

Robertson, in his "History of America," says:—"Among savages, who have no property to estimate, no hoarded treasures to count, no variety of objects or multiplicity of ideas to enumerate, arithmetic is a superfluous and useless art. Accordingly, among some tribes in America, it seems to be quite unknown. There are many who cannot reckon farther than three, and have no denomination to distinguish any number above it. Several can proceed as far as ten, others to twenty. When they would convey an idea of any number beyond these, they point to the hair of their head, intimating that it is equal to them, or, with wonder, declare it to be so great that it cannot be reckoned."



44.—JEDEDIAH BUNTON.

This, from being traced to feebleness or an undeveloped state of the faculty of Number, has led many to adopt the view of the "development theory," that man has gradually developed from some species lower in the scale of creation than himself; to the exclusion of the belief that man was created *perfect* from the first. Although it matters little how the Creator has chosen "His wonders to perform," yet, for the love of truth, and as such questions are considered of sufficient importance as frequently to engage the attention of the highest minds, it may be no digression here to try to ascertain the justifiableness of ascribing this inefficiency in the art of arithmetic among savage tribes to a weakness in the faculty of Number, rather than to other causes which seem to have been overlooked—such as a want of terms or signs, as mentioned by Robertson, to express their ideas concerning numbers. In reference to the aborigines of America, Robertson also says, "But however narrow the bounds may be within which the knowledge of a savage is circumscribed, he possesses

thoroughly that small portion of it which he has attained. *It was not communicated to him by formal instruction*; he does not attend to it as a matter of mere speculation and curiosity; it is the result of his own observation, the fruit of his own experience, and accommodated to his condition and exigencies." He also says that they sometimes spend whole days, even while marching together, without exchanging a word with each other. This condition evidently left them no chance of establishing among themselves such terms as are necessary to conduct their calculations to any great extent, much less a system or set of rules, on attending to which even our own proficiency in arithmetic so much depends. If, therefore, they regarded any number above three, ten, or twenty as innumerable, it probably arose from this cause, and not from an undeveloped state of the faculty of Number. "For as soon," says Robertson, "as they acquire such acquaintance or connection with a variety of objects that there is frequent occasion to combine or divide them, their knowledge of numbers increases." This subject may in itself appear not worth such a lengthy consideration, although it is as well, in these days of "positivism," to clear up what, if misunderstood, may be referred to for the purpose of giving countenance to principles that may prove somewhat heterodox.

29. ORDER. Method, arrangement, neatness, system, and also confusion are said to be perceived by a faculty phrenologically called Order. Mr. Combe considers that only the order of physical objects is regarded by this faculty, and that the systematic arrangement of ideas comes under the cognizance of the reflecting faculties. If, however, it is to be believed that some faculties furnish their own perception of order, it may be questioned whether there is a faculty whose special function is to preserve order. But as Phrenologists have observed some persons to be highly gifted in every particular excepting in that of order, and others to have regard for nothing but order, and in this manner have found no proportion between the perception of order and the other faculties; they have considered themselves justified in claiming for the perception of order a special faculty. The part of the head said to be the seat of its organ is frequently found developed in persons who are utterly inattentive to the arrangement of their household goods, but who, nevertheless, are very systematic in business, literary, and other pursuits. It is not unusual for literary men to overturn a library of several hundred volumes in search of the best mode of portraying an idea, or of making a correct quotation. The library of Dr. Johnson was an instance of confusion arising actually from love of order, which

he possessed, notwithstanding his graceless manner of fingering the sugar at the "tea-party," and of extinguishing the light by turning the candle over and letting the grease fall on Mrs. Boswell's carpet.

30. EVENTUALITY. Motion is a quality of matter distinct from its other qualities, such as form, size, weight, colour, &c., which phrenologists maintain is perceived by a *special* faculty, namely, Eventuality. It takes cognizance of occurrences and events, their causes and consequences ; and gives an appreciation for adventures, narratives, history, and whatever is comprehended by the term phenomena. Eventuality has been called the faculty of Memory, though not with propriety, as it remembers only what belongs to its own province, namely *events* : while places, colours, faces, sounds, &c., are remembered by their respective faculties.

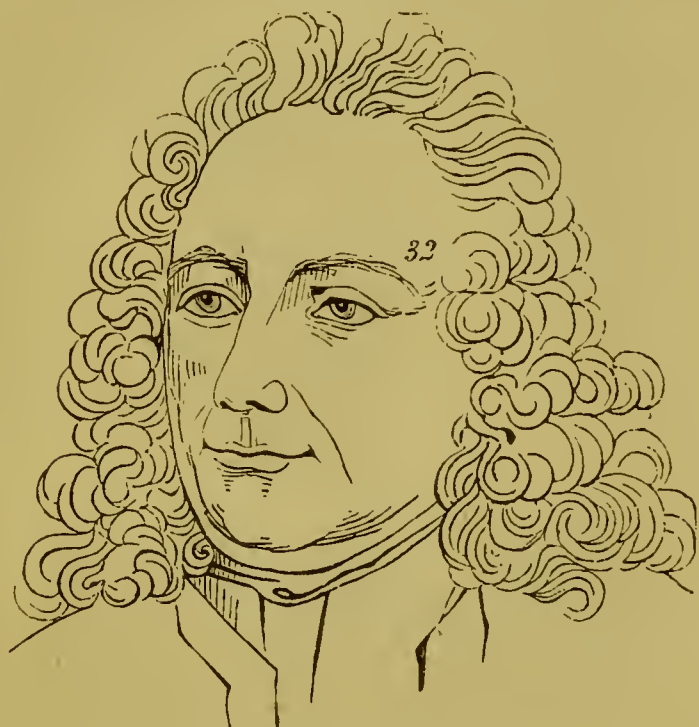
31. TIME. The metaphysical speculations concerning time have been very vague and contradictory. La Place says, "Time is to us the impression left on the memory by a series of successive events." If, however, we measured time by occurrences, our notions of it would be very incorrect, for time never appears so short as when the mind has most before it, and never so long as when the mind is unemployed. Events serve, therefore, but as a bad measure of time. Fénelon says, "To show us the worth of time, God, most liberal in all other things, is exceedingly frugal in the dispensing of that ; *for He never gives us two moments together, nor grants us a second until He has withdrawn the first*, still keeping the third in His own hands, so that we are in a perfect state of uncertainty whether we shall have it or not." Without regarding the beautiful moral which this great divine intended to teach, an observation is here made with regard to time which, though poetical, is so correct as to be irrefutable. It is from the fact that we can discern time so distinctly as to know that "two moments never come together," &c., that the phrenologist is justified in *regarding time as an entity cognizable through a special faculty of the mind*, the function of which faculty is to perceive duration or the lapse of time. This faculty manifests itself in a variety of ways, as in the regularity of the dancer's steps, in the measured notes of the musician, in the metrical lays of the poet, and in the observance of chronological order by the historian, &c.

32. TUNE. This faculty gives the perception of *music*. Sir G. S. Mackenzie says, "While all persons with perfect ears perceive the impressions of sound, and can distinguish different sounds, many cannot perceive the relations of sounds that produce harmony, and some not even the succession that forms melody." It seems by this that the power of distinguishing different sounds

is either distinct from that which perceives their harmonious order, or that the one is but an undeveloped state of the other. To admit the latter would be to allow that habit or education accounted for this difference ; but from the fact that the labour of the music-master is often bestowed in vain, it would appear more proper to infer that the perception of different sounds is furnished by a faculty distinct from that which gives the perception of music, and, therefore, that these have separate organs—that of Tune being situated in the vicinity of Ideality, and that of Sounds probably at the base of the brain, which anti-phrenologists have

said to be regarded by phrenologists as functionless. Nearly every writer on Phrenology has commented on the extreme difficulty experienced by unpractised persons in estimating the power of the faculty of Tune, which is owing to the superciliary ridge being frequently mistaken for its organ. Many blunders have no doubt been committed through connecting with this faculty a *talent* for music, which it does not give, but merely the *perception* of music.

Though it is one of the



45.—HANDEL.

ingredients, yet other qualities are necessary to constitute a musical talent, such as a good voice, a perception of time, to judge of intervals ; a perception of weight, to give the mechanical skill necessary in performing music successfully, &c.

Through the faculty of Causality, which renders us peculiarly capable of instruction (see page 82), it is possible for persons to learn music very accurately by *rule*. Hence many persons, even with a keen appreciation for music, experience more trouble in *learning* the art of performing music than others with but an indifferent ear for music. It is by instances of this kind that many novices in Phrenology get confounded, and are led to disbelieve Phrenology, because it does not agree with their limited experience. Persons having the faculty of Tune in a weak degree are apt to regard music but as a noise. This notion should, how-

ever, go for nothing, as it comes from those who want the very faculty necessary to render them capable of judging correctly of the matter. The fact that the love of music arises from the *possession*, and not from the want of a faculty, argues for itself that its exercise should not be condemned. It may, nevertheless, be abused, and that by indulging it to the neglect of our other faculties, the punishment for which would be the loss or deprivation of all pleasure but that afforded by the exercise of the musical faculty, instead of being equally delighted with the regularity of the dancer's steps, the harmony of colours, the beauties of nature, and such joy as is experienced in *equally* exercising all *our faculties*.

“ But every virtue of the soul
Must constitute the charming whole,
All shining in their places.”

Again, the faculties of the mind, owing perhaps to their connection with organs, are apt to tire if overworked ; hence the necessity of *several* faculties, that we may be interested by the exercise of some during the repose of others.

“ There is a time when poets will grow dull ;
I'll e'en leave verses to the boys at school ;
To rules of poetry no more confined,
I'll learn to smooth and harmonise my mind,
Teach *every thought within its bounds to roll*,
And keep the *equal measure of the soul*.”—*Pope*.

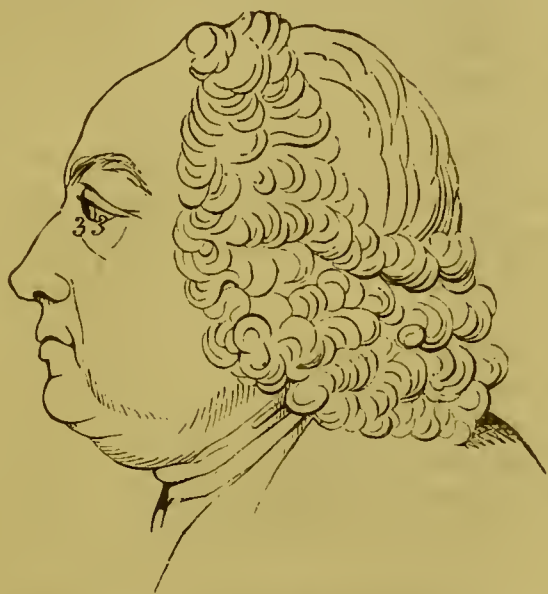
33. LANGUAGE. Speech, much as it is thought to be peculiar to the human race, has its origin in a faculty not less common to animals than to man. If man was not capable of transmission of thought (which power particularly distinguishes him intellectually from the brute creation), his use of the faculty of Language would be little better than theirs. He would then employ it to express his feelings merely by laughing, crying, groaning, sighing, and such interjections as correspond with the barking, howling, snarling, and growling of the dog, the cooing of the dove, the grunting of the pig, &c., which form the natural language of each.

It will therefore be perceived that the power of speech in man is due not to any mental faculty which he possesses in addition to those found in animals, but to the formation of the mouth, or to the construction of the vocal organs. Animals are at no loss, however, on this account, for if they had mouths favourable for forming words, they have not the faculties necessary to comprehend their use, their knowledge being practical, and not dependent on inquiry. The parrot is an example, and though capable of

repeating almost any word or set of words, it is unable to *learn* anything from them. To repeat words and to comprehend their use are distinct powers, and should not be confounded. Were this not so, babbling idiots and those parrot-like characteristics of much talk and little sense would be unknown.

Language, then, is a mental faculty which furnishes the power to distinguish, remember, and repeat words, but not the understanding by which to apply them. This is ascertained by the great disproportion in which these powers are found in the same individual. Some men, though highly intellectual, are frequently at a loss for words to express themselves, while others are very verbose, and can talk for hours together about nothing, as if they

delighted in mere words, without any regard for their meaning. That language is not merely a consequence of hearing, though somewhat dependent on that power, is borne out by cases of mutism, in which a person may be deaf but not dumb, and dumb but not deaf. The seat of the organ of Language is at the base of the anterior lobes of the brain, in which situation its development cannot be ascertained except by the fulness of the eye. It will be remembered that Dr. Gall discovered the organ of this faculty



46.—LANGUAGE (Large).

by observing that those of his schoolfellows who had a wonderful verbal memory and a ready flow of words were what he called "ox-eyed." The success attending the discovery of the organ of Language is greatly due to the accident which confined Dr. Gall's attention to the eyes of youths. When corpulency sets in, which is not generally during the period of youth, the eyes will protrude, not in consequence of a large organ of Language, but from fat which generates behind the eye, and forces it forwards. If, therefore, Dr. Gall had observed the eyes of adults as well as of youths, he would have been frequently perplexed by finding persons with full eyes who made no oral display. Thus Dr. Spurzheim notices that slight hydrocephalus, common in children, forces the eye forward, and thus interdicts it as an external sign of the organ. Hence lean persons, even with hollow eyes, may be more talkative than fat or hydrocephalic persons with large eyes. However Dr. Gall's observations with regard to the organ of

Language may to a superficial observer appear invalidated by this fact, they are, nevertheless, fully corroborated by pathological investigations which have been made since his time. Mr. Bouillaud, in a communication addressed to the French Academy of Medicine, in 1848, makes the following statements :—

“ 1. In those cases where the partial or entire loss of speech depends on disorganisation of the brain, the seat of the affection is generally in the anterior lobes.

“ 2. All deep-seated alterations in the anterior lobes cause a partial or entire loss of speech.

“ 3. Derangements in the middle and posterior lobes do not perceptibly influence speech, provided the anterior lobes are unaffected.”

Notwithstanding the conclusive manner in which these researches coincide with those of Dr. Gall, yet Dr. Hunt (from whose work their relation is transcribed) prefers to believe that language is dependent on the intellect, and not on an organ in the brain. He accounts for the loss of speech attending the derangement of the anterior lobes of the brain as a consequence resulting from the dependence of that power on the perceptive and reflective faculties, which are dependent on the healthy state of the anterior lobes of the brain. In this belief Dr. Hunt evidently forgets one incident, which, he says, “ is mentioned by Dr Beattie, of a gentleman who, after receiving a blow on the head, lost his knowledge of Greek, and did not appear to have lost anything else.” If this is not actually a species of affectation or hypochondria, it most clearly shows that language is not *dependent* on the intellect, since the loss of Greek was not accompanied with a loss of intellect and speech also. Dr. Hunt quotes four other such cases as the above, in two of which occurred the loss of memory of substantive nouns, but not of adjectives. In reference to these, he inquires, “ If there be a special organ of Language in the brain, what explanation can be given in such curious cases where the loss of power was confined either to particular languages or to certain parts of speech? Are we to assume a particular organ for every language and its parts?” If Dr. Hunt considers that such partial forgetfulness of speech can justify his doubts with regard to an organ of Language, and his demand for a separate organ for each different language, it seems rather strange that he should resort to such obscure cases for that purpose, when the common occurrence of persons forgetting a particular word would enable him on the same ground to demand a separate organ not only for every language, but for every word. The notion is as absurd as to demand a different tongue to convey each different

flavour, because the tongue sometimes refuses to convey but one particular flavour ; or to doubt, on this account, whether there is such a thing as a tongue.

These compose the entire known number of the OBSERVING FACULTIES, which, by their power of discernment, differ from the blind or emotional nature of the *propensities* and *sentiments* as a state of wakefulness does from sleep, and thereby they constitute the fundamental elements of the INTELLECT.

Consciousness, or the knowledge we have of our own existence, is a consequence of the wakeful nature of the observing faculties.

Perception, Conception, Memory, Abstraction, Imagination, Reason, &c., are not faculties according to the phrenological acceptance of the term, but qualities which characterise the various degrees and modes of operation of the observing faculties.

Perception is the first or simplest stage of action of the observing faculties, whereby they receive impressions of external objects through the senses.

Conception is the power possessed by the observing faculties of retaining an impression of whatever has been perceived.

Memory is an emanation of Conception, by which we are able to remember and recognise whatever we have before seen, whether in idea or in fact.

Abstraction is that state produced when our conceptions, or the impressions which have been conceived, become so vivid as to obtrude themselves, and so to exclude from the observation the *realities* that are passing before the senses.

Imagination is that power of reviewing in idea whatever has been perceived in fact. This, however, is but its simplest form, and scarcely deserves to be considered other than as one or synonymous with Conception. What is generally understood by imagination, is that power arising from the independence of action one of another of the observing faculties, by which their objects may be reviewed in a transposed or different order to that in which they were originally perceived ; just as the separableness of the notes in music admit of the transposition of their order, and of producing various effects which may be either grave or gay, sacred or diabolic. Another exercise which conduces to form the imagination, is that power of the observing faculties of reviewing their respective objects in a diminished or magnified degree, from which arises the idea of such monstrosities as are represented in fabulous legends, pantomimes, &c. The faculty of Weight, for example, may in this whimsical state of action so increase in idea the gravitating tendency of anything as to render, say, a cherry-

stone, immovable as the Pyramids ; or it may so reverse the force of gravitation as to represent it as possible to rear palaces and towers, or build castles, not brick by brick, or stone by stone, but by the mere waving of a wand, or by word of command. Thus is formed the imagination, which furnishes wherewith for the poet to admire, the romantic to marvel at, the maniac to rave at, the fool to giggle at, and the timid to fear.

It is, probably, this power that is referred to by the person who defines imagination as "reason run mad;" and which is a very apt definition, since, in contradistinction to reason, it is concerned with exaggeration, and not the truth as it is perceived. However objectionable it may seem to those who sternly demand "the truth, and nothing but the truth," there can be no doubt as to this excursiveness of the mind being a desirable quality, since it affords such an inexhaustible source of diversion ; notwithstanding it serves in many instances but to aggravate those of a woeful turn.

REASON is the inductive or calculating quality of the observing faculties on which depends the power of inferring from premises, anticipating consequences, &c. It is superior in degree to *perception*, from which it differs in this respect—by a perceptive degree of the faculty of Weight, we know of the ponderousness or immovableness of a mountain ; but by a reasoning degree of that faculty we know that a mountain may be removed by shovelfuls. By the faculty of Size we know large from small ; but a reasoning degree of the faculty is necessary to know that though the large can contain the small, the small cannot contain the large. To distinguish few from many is the function of the faculty of Number, of which, in addition to other faculties, nothing less than a reasoning degree is necessary to understand that three and two make five, simple as this computation may seem. The calculations made by each faculty singly scarcely deserve to be called reason, according to the sense commonly implied by that term ; but if we would, as far as it is possible, know what reason is, we must trace it from its source, and, to prevent confusion in this, it is necessary to know its simplest forms by the same name.

The inferences formed by the *co-operation* of the faculties constitute rather what is usually understood as reason—such as that a given colour does not necessitate a *particular form*, or that what is red need not therefore be round, or what is large need not necessarily be heavy, &c. Besides by logical deduction, reason may manifest itself in actions, as in the sculptor's art, where the effect of every stroke is premeditated. Reason is, in short, the employment of the intellectual faculties to an end or purpose,

whether theoretically or practically. And, notwithstanding it has been asserted by Mr. George Combe as an undeniable fact, "that genius for works of art is not possessed in proportion to the strength of the understanding," there is much reason to believe that, by an analysis of these different qualifications, it would be found that the exercise of either depended upon the same elementary faculties, and that the difference is a consequence rather of education or training. It will be easy to conceive that the faculties employed in the art of painting in water-colours are precisely the same as those employed in the art of painting in oil-colours, yet are there hundreds of artists who can attest that the practice of one does not secure proficiency in *both*. To contend that a different and distinct mental constitution is necessary to the pursuit of each different department of genius, because individuals are seldom found to excel in more than one, is about as absurd as to assume that each different kind of diet requires a special stomach for its digestion, because some persons can digest what others cannot. The differences, however, greatly depend upon what we *habituate* ourselves to. It is not unlikely that Dr. Johnson was not so much in the wrong as phrenologists have since represented when he said, in allusion to the mind, that "he who can walk east can walk west;" though it is much to be regretted that he should have expressed himself upon so important a subject in such an indefinite manner as to admit of such misconstruction. However, it cannot but appear incredible that one of such gigantic understanding should have entertained such a notion concerning the mind, as to equal the folly of supposing that because a man can follow one profession he is equally capable of pursuing another which depends upon the exercise of a different set of faculties; though, as perfection in an artist depends upon no mean degree of development of most of the elementary faculties of the intellect, it seems but reasonable to infer that he who is capable of excelling as an artist may, with the requisite education, excel in most other branches of learning—perhaps not necessarily as an orator or historian, but certainly in mechanics, architecture, anatomy, botany, optics, astronomy, and other physical sciences. There are instances not a few where artists have figured in many literary departments; among them may be mentioned Socrates, who was by trade a sculptor. Indeed, *he* would make but an indifferent poet or philosopher who lacked the faculties necessary to constitute an artist.

Wordsworth the poet, who was by no means inattentive to matters concerning the mind, seems to have entertained a notion

similar to the above, as will be seen by the following quotations from his works—

“The shepherd-lad, who in the sunshine carves,
On the green turf, a dial—to divide
The silent hours ; and who to that report
Can portion out his pleasures, and adapt
His round of pastoral duties, is not left
With less intelligence for *moral* things
Of gravest import.”

Again he says—

“Exchange the shepherd’s frock of native grey
For robes with regal purple tinged ; convert
The crook into a sceptre ; give the pomp
Of circumstance ; and here the tragic Muse
Shall find apt subjects for her highest art.

According to these interpretations, then, the error of the metaphysician in regarding perception, memory, reason, &c., as so many native powers of the mind cannot but appear palpable ; as, also, the fact that such terms are very indefinite, and convey little or no information concerning the function of any one of the elementary faculties of the mind. And, as it is shown that reason may manifest itself in actions such as are employed with a view to accomplish some end or purpose, it will also appear that some such power must belong to many of the animal species, since many of their operations exceed what may be accounted for by instinct ; that is, according to the lexicographic signification of the term, which implies an impulse to act without choice or judgment.

Dr. Carpenter says, in his work on “Animal Physiology,” “It is a common, but entirely erroneous idea, that *reason* is peculiar to man ; and that the actions of the lower classes of animals are entirely due to instinct. There can be no doubt, however, that reasoning processes exactly resembling those of man are performed by many of the mammalia, such as the dog, the horse, and the elephant ; and it is probable that, although we are best acquainted with these animals, on account of their tendency to associate with man, there are others which have powers yet higher. We must admit that an animal reasons, when it profits by experience, and obviously adapts its actions to the ends it desires to gain, especially when it departs from its natural instincts to do this.”

In illustration of this, Dr. Carpenter says, “Some horses kept in a paddock were supplied with water by a trough, which was occasionally filled from a pump—not, however, as often as the horses seem to have wished ; for one of them learned of his own

accord to supply himself and his companions, by taking the pump-handle between his teeth, and working it with his head. The others, however, appear to have been less clever or more lazy; and finding this one had the power of supplying their wants, they would tease him by biting, kicking, &c., until he had pumped for them, and would not allow him to drink until they were satisfied. That this was not a mere act of *imitation* appears from the circumstance that the horse did not attempt to imitate the movement of the man, but performed the same action in a different manner, evidently because it had *associated* in its mind the motion of the pump-handle with the supply of water."

In admitting that animals reason, what of our own superiority do we forego that so much indefatigable zeal should be employed to trace every act in animals to instinct? They certainly inhabit the same earth as ourselves; they are governed by the same physical laws, and have the same elements to deal with. But, for the mere sake of gratifying our pride, are we to delude ourselves with the false notion that they observe these laws and comprehend these elements in a manner different to what we do ourselves? What, indeed, would have been the use of eyes and ears to animals if they know everything by instinct, and have nothing to learn from the external world? The idea is inadmissible that these organs serve not to communicate with internal faculties which furnish perception and memory, by which properties the animal is provided with materials for its judgments.

The fact seems to have been overlooked that the oratory of Burke and the braying of an ass are effects produced by means of the same instrument. Hence the supposition that we come by our knowledge by a process different to what animals do, which supposition is regarded by the unthinking as explanatory of the superiority of the human mind over that of animals. It is to reconcile us to no such fallacy as this that philosophers tell us that "Nature employs the same means to accomplish the same ends in every individual of her vast family; and that one general law governs the developments of the whole animal creation—man not excepted."

The fact is, what is instinct in animals is nothing more in man; and the superior uses to which man puts those faculties which he possesses in common with animals is due, not to a different process in their mode of operation, but to a more perfect degree of development of those faculties; and also to their *co-operation* with other faculties—to be considered subsequently—which man possesses in *addition* to those possessed by animals. In illustration of this is the mode in which the dyer can, by an

additional colour, diversify the tints of other colours to an almost unlimited extent. As also in chemistry, where an innumerable variety of effects are produced by the employment of an additional chemical element. By no human art could birds' nests, for the use required of them, be made better, with exactly the same materials, than they are made by birds. The symmetry or order exhibited in the form and delicacy of finish of a bird's nest must prove to everybody that such a contrivance is due to a planning, mechanical, and even artistic skill. When we consider that this work is done without hands or tools other than a rigid, inflexible bird's beak, it will not seem unreasonable to infer, if their wants impelled them to it, that birds, with a more favourable conformation, would equal us in many of the arts on which we particularly pride ourselves. This inference will be doubted by few who have seen a bird braced to a "bucket-board," drawing its water through a hole as from a well, by means of a miniature bucket attached to a piece of string. But the hackneyed idea with regard to birds' nests, as taught by nearly every "school-book of lessons," is that their sameness proves them to be the work of an undesigning instinct. If even the premises in this case were correct, they need not justify the conclusion, since this supposed sameness may be accounted for by the fact that exactly the same faculties are employed in most instances, under exactly the same circumstances. It happens, however, that the premises are at fault, for, by an attentive investigation, as much difference will be found among the nests of birds of the same species as almost to correspond with all the varieties of human architecture, from a pig-sty to a palace. It is well known that birds build their nests on foundations of every conceivable kind; whilst the materials employed will differ, and consist of either sticks, hay, straw, moss, feathers, or whatever else is suitable, according to whichever of these is rendered most accessible by the place and season. The common house-sparrow has been known to use even paper, rags, and cocoa-nut matting. And, what is more, birds invariably reject the worst when they can procure what they judge to be the best materials for their work; which fact alone shatters at once the idea that the actions of animals are without choice or judgment. However much the spider, in the weaving of its web, may resemble a mere unconscious machine, there can be no doubt but that it *thinks* as well as acts when engaged in repairing the broken part of its web, for there is no regular time when the web needs repairing, since the accidents to which it is subjected are uncertain; nor are the repairs needed always the same. It is, therefore, plain in this case that the

insect has to "look about" and *know* what it is doing. These matters, though apparently insignificant in themselves, claim our consideration, since they serve as evidence in opposition to the idea that animals act without thought, and materially affect the hypothesis of those metaphysicians who refer the operations of animals to instinct, as something different to that which, in part, constitutes the mind of man. Nor can the views which these instances suggest in regard to the mental constitution of animals be objected to on the score of being novel, for they are precisely the same as those held years ago by the Rev. Sydney Smith, who, in language strictly phrenological, says, "Nature has not



47.—SKULL OF GORILLA.



48.—DUGALD STEWART

formed man totally different from other animals, but rather added to his brain new organs. She has not in his case pulled down the fabric of sentient being, and reconstructed it upon a totally different plan; all she has done has been to add to the original edifice Corinthian capitals and Doric columns, bestowing reason, not to *supersede*, but to guide, direct, and perfect his animal nature. We may rest assured, therefore, that whatsoever principles, in the shape of instincts, are given to animals for their preservation and protection, are also instincts in man; and what in them is a propensity or desire, is not in him anything else." If, however, it is assumed that the term *instinct* implies an *inherent impulse* in justification of its application to the traits of animals, it must be allowed that there is not a single human faculty which, by this rule, may not also be called an *instinct*, since all the faculties are instinctive, inasmuch as they are dependent on an internal or innate principle. As the term in this sense scarcely admits of limits, but may mean anything or everything, it can serve no other purpose in science than

that of exciting controversy and creating discord. Hence the many volumes that have been written to no purpose on the subject of instincts, and the discretion of phrenologists in omitting to employ this term in the propoundings of their system.

As, however, the term instinct has now become too general to render its rejection easy, it may be suggested here, and it is hoped without impropriety, that it be employed never but in its lexicographic sense, and then only in reference to the emotional faculties, such as the propensities and sentiments which produce *feelings* only, and not to the *intellectual powers* which furnish memory and judgment; as by designating these by such a term but gives a mystery to their character, which but confounds the student and renders their explication difficult.

Hitherto only those of the Intellectual Faculties have been considered; by which we become acquainted with the external world through its component qualities—namely, the Observing Faculties, which are common to both man and animals.

Those which are now to engage our attention are peculiar to *man*, and form the distinguishing difference between his Intellectual Powers and those of animals. These are called the *Reflective Faculties*. The Organs of the Observing Faculties occupy in animals the whole of the anterior region of the brain, and in man only part, which is overtopped by the organs of the reflective faculties, which animals do not possess, even in a rudimentary degree. This circumstance considered, it would seem easy to ascertain the functions of these organs. The fact, however, has been far otherwise, owing, in a great measure, to the common mistake among phrenologists of describing each faculty by its most complex operations, such as, in many cases, do not manifest themselves until after a long course of education, or such as not unfrequently depend on several other faculties. In consequence of this it has been the experience of the writer to meet with, not only students, but even professors of phrenology, who have acknowledged themselves disappointed on meeting with persons



49.—JOHN LOCKE.

the conformation of whose heads they have thought should qualify them to rank among philosophers, but whose conversation has shown them to be about as rich in philosophy as the tip of a monkey's tail. If it is not actually impossible, it is certainly difficult to describe the function of some of the faculties by actions in which such faculties play the only part. In such cases the above remarks cannot well apply; but, to the reflective faculties, to which they particularly refer, qualities are too often traced which belong rather to the *combined* exercise of several faculties, and in which qualities the reflective faculties form but an item. This, however, will become more apparent as the reflective faculties shall now be respectively considered. These are—(34) COMPARISON and (35) CAUSALITY.

34. COMPARISON. Dr. Gall discovered the organ of this faculty by observing a protuberance which invariably presented itself in the upper and middle part of the forehead in those persons who in their conversation employed figurative language or had recourse to analogies. This, of course, is presumed to be but one, and by no means the simplest, mode in which the faculty of Comparison manifests itself, since its organ is frequently found developed among persons who have not attained that degree of proficiency or information by which an analogical discourse can alone be understood or employed. Something of this was noticed by several of the leading members of the Phrenological Society, founded in Edinburgh in 1820, who, with the view of ascertaining the fundamental function of the faculty, ventured several conjectures, which, by their contrariety, instead of elucidating the matter, served each but to refute the other, and show that the *primitive* nature of the faculty was unknown to either of them. Mr. George Combe gave it as his opinion that the faculty of Comparison gives the perception of similitude and dissimilitude between opposite qualities or ideas. To this Mr. Scott objected, under the impression that *that* power belonged to the faculty of Wit. Mr. Hewett Watson very justly remarks that Comparison, like memory, is nothing more than a mode of activity belonging to each of the intellectual faculties. He urges that, as it is admitted that the faculty of Form compares forms, that Tune compares notes, and that Colour compares colours, it is contrary to all analogy to assign Comparison to another faculty as its primitive function. By this reasoning, which seems strictly logical, it appears equally unjustifiable on the part of Mr. George Combe to suppose a third faculty necessary to perform the function which belongs to the combined exercise of two faculties, namely, to distinguish the relationship between two distinct quali-

ties—if this is what Mr. Combe means when he says that “Comparison may compare a colour and a note, a form and a colour, which the other faculties by themselves could not accomplish.” Mr. Hewett Watson also says, “The faculty of Comparison will probably originate some specific perception distinct in kind from those of any other faculty, and its comparisons will be made between its own perceptions only, as is the case with every other intellectual faculty.” In this belief he regarded the simple function of the faculty of Comparison as not yet ascertained; and, by his observations and experience, was induced to suppose that it furnished the “*perception of conditions*,” and proposed that the name of the organ should be altered to “Conditionality.” To this view Mr. George Combe assented, until it was refuted by Dr. Spurzheim, who said that the perception of conditions belonged to the faculty of Eventuality.

So far, then, it appears that the precise fundamental function of the faculty of Comparison is yet controverted, and no doubt it ever will be, unless a different method is adopted to that employed by these gentlemen in conducting their investigations. Their mistake has been the common but erroneous one of pursuing the stream the wrong way; for as well might we expect to discover the source of a river by following it to its extremities away from whence it springs, as expect to discover the simple nature of a faculty by observing only to what it leads. It is not by comparing the different qualities which characterise the productions of highly-wrought minds with the various cerebral organisations of their authors that we shall arrive at correct ideas concerning the primitive nature of the intellectual faculties. This will be much better accomplished by observing the manifestations of those faculties in their *earliest* stages, even before education gives them any particular direction. Had Mr. Hewett Watson, with his perseverance, proceeded upon this plan in his inquiries with regard to the faculty of Comparison, the results would have been far more satisfactory than they are. And, as the object of discovering the elementary nature of the faculty of Comparison remains yet unaccomplished, and is still desirable, an attempt to this purpose upon the plan now proposed may as well be made here. In the first place, then, we must seek among the humblest classes for a development of the organ; but as this is entirely wanting in animals, we must choose above them. Perhaps, therefore, we cannot do better than confine our attention to children, in whom the organ is generally fully developed, and the faculty likely to receive no bias from education. By watching carefully in what respect they differ intellectually from animals, we shall be

materially assisted in our object, since our concern is with regard to a *distinguishing* quality between them. It is by the manner in which children amuse themselves while at play that we shall best see how the young mind unfolds itself. Now, if to a child several toys be given without describing their use, it will of itself make the best use of them possible; first by looking at them, then by touching them, then by tasting; and so, by these several means, it searches them through and through, until it informs itself of their various qualities—an exercise prompted from being grateful to the observing faculties. So far, however, nothing is observed which is not also usual among animals. Cats, in their way, will pry into and examine everything in the place. Monkeys will also thoroughly examine into whatever they can seize upon, even though they sever it into shreds in so doing. Probably the destructive propensity is *gratified* in this way, but they also, with eyes, nose, and tongue, appear to test each part they rend asunder. But what may be observed, in addition to all this, in children is their power to know each toy by its name; and when they have not been told the names of their toys, they very soon invent names for themselves, and these, though sometimes laughable, are often very sensible, from being so expressive of the nature or qualities of the objects to which they are assigned. Marbles have been called “knobbles” and “bowlies,” and a drum a “bomba” or “tuntum.”

Now here is a power that animals never manifest; nor must this be thought to arise solely from their want of speech, because the parrot, magpie, and others (not defective in this respect) make no such use of this their loquacious power. Neither should it be supposed that the faculty of Language alone furnishes this power in children to name their toys. There is something more here than the mere power to distinguish and remember words, and to repeat them when the talking apparatus is not defective. Here is seen the power to apply words, which, for reasons given in page 60, is shown not to be furnished by the faculty of Language.

As in this “child’s play” is observed a power evidently distinct from what is furnished by any other faculty, where can be the objection to its being regarded as the missing foundational element of the faculty of Comparison, especially since it cannot be traced to any other? Whether to regard it as such is justifiable or not will appear as we pursue it through its progressive stages upwards.

We commence, then, by observing in the child a power distinct from all others, and wanting in animals, a power by means of which it names its toys—a power, in short, to connect ideas with

signs. It may be reasonably presumed that these signs need not be confined to words, but may consist of either motions, words, figures, or letters. Nor does it require the most profound understanding to know how, out of this power in conjunction with the other intellectual faculties, has grown the language of every nation, and also the more complicated art of making such language intelligible by the use of letters. It has, of course, been manifested in different ages, and by various nations in different ways, as among the ancients by their use of metaphor and symbols, and among the Egyptians by their hieroglyphics.

Here, then, the fact almost presents itself that by this simple power of connecting ideas with signs is furnished the means which enable man to communicate or exchange ideas one with another; a power by means of which man can add to his own experience that of others, both of the present time and of past ages, thus rendering his intelligence ever progressive, whereby he holds his intellectual superiority over the stationary condition of the brute creation. But the importance of this power, so simple in itself, is best seen by its *want*. Deprive, say the "musical world," of this power of connecting ideas with signs, and who could enjoy those sublime emanations of the mighty Handel, Mendelssohn, Mozart, and their clique? These, like bubbles on the ocean, would shine, glitter, disappear, and be lost for ever. The same applies equally to poetry, philosophy, history, &c.

In reference to the faculty of comparison, Mr. George Combe says, "It prompts to the invention and use of figurative language; and the speech of different nations is more or less characterised by this quality, according to the predominance of the organ." This he probably *assumes*, because, as he also says, "Dr. Murray Patterson mentions that the Hindostanee language abounds in figures, and that Comparison is larger than Causality in the heads of the Hindoos in general."

There can be no doubt, however, that the language of that country is but poor whose literature consists much of figurative expressions, and that their use probably is rather the result of necessity than choice, and suggested by Comparison, in consequence of such defect. Figurative speech may therefore be but an indirect and not a necessary *consequence* of the faculty of Comparison. Why among the Hindoos, who possess in an eminent degree the faculty that should provide them with a complete language, is found one so meagre as to occasion the use of figurative terms, may be explained upon the principle that "too many cooks spoil the broth." By the very profusion of the faculty, too much is attempted; and therefore but little is accomplished. Its

suggestions are too many, various, and conflicting; and consequently they are not accepted. On this account the recognised language remains scant, and insufficient to cover all ideas, and necessarily becomes figurative.

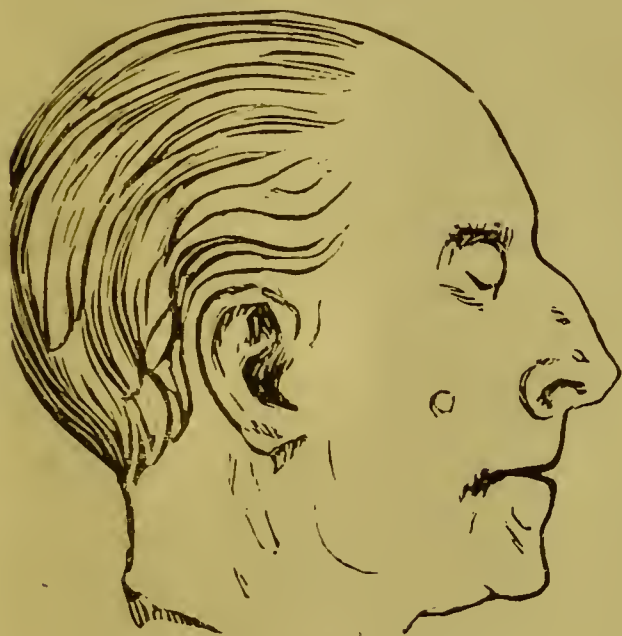
Dr. Spurzheim says of the faculty of Comparison that "its essential result is generalisation and discrimination." That these qualifications originate in, and may be resolved into, the simpler power of connecting ideas with signs is almost self-apparent. Take from a judge his pen, and where will be his power to discriminate between the evidences criminative and defensive from which he deduces his conclusion and determines his judgment? It may be redeemed by his memory, but this would be such a tax upon his brain as soon to confound and wear him out.

Generalisation, or the power to reduce to genus, is strictly due to the "*nominative art*." Hence, the organ of Comparison is found developed in those who have distinguished themselves in this particular. In a letter, received by Mr. George Combe, concerning the faculty of Comparison, Dr. Spurzheim says, "The philosophers styled *Nominalists* had it in an eminent degree." Though subsequent writers on the subject appear to have given no attention to this fact, it seems to afford no mean support to the view here taken. Something resembling this power of connecting ideas with signs may be observed in animals—as in the cat, when it runs to the door on hearing the cry of "Cats' meat." There can be no doubt, however, but that this in them is reached by means of other faculties, after the manner that the loss of sight in a blind man is in part made up through his other senses.

As reading and writing—on which accomplishments depend man's literary fame—are in a great measure the effects of this faculty, it may be supposed that the attainment of these should be in proportion to the development of the organ of this faculty. Among many distinguished men, who must have been thorough masters of these arts, we do not, however, find it so fully developed as might be expected. The retreating forehead shown in the cast taken from the head of Sheridan presents an example of this. Notwithstanding that the said arts of reading and writing have been reduced to such easy rules as to render them almost accessible to the observing faculties, it appears, from a report which has been published, that they were acquired by Sheridan not without some trouble to himself and great anxiety to his tutor, who, while he despaired of ever making anything of Sheridan, entertained very high hopes of Burke, who was under his training at the same time. The proficiency displayed by Burke over

Sheridan in his scholastic studies is probably owing to a superior degree in the former of the faculty now under consideration, and through which such studies are especially conducted. Their organisations at least justify this inference, if the function of the organ of Comparison be such as is here represented. (See cuts 50, 51.)

The view of the elementary nature of the faculty of Comparison thus proposed may be correct, although not the most philosophical or logical reasoning has been employed in its



50.—SHERIDAN.



51.—BURKE.

support; and though much better might be adduced, it may nevertheless be wrong. If correct, it follows to be considered whether the name which the faculty has hitherto borne (viz., Comparison) be the most appropriate; whether the term "Nominality" would not better express its nature; or whether this term sufficiently reaches its more rudimental nature of connecting ideas with signs where names need not be employed; or whether, after all, its present name does not best suit the nature of the faculty, which is that of *comparing* certain ideas with certain signs, by use of which signs the ideas to which they refer may be recalled at pleasure. If, however, the view here set forth be wrong, these considerations will, of course, be needless. But, in either case, not only this name, but several, might be very advantageously replaced by others of a less vulgar tongue; for it is in consequence of the faculties being designated by such common names that so many errors are entertained of their

nature, it being so usual for persons to attach to such names a meaning of their own, which seldom has any reference whatever to their *phrenological* signification. As an example of this, a very fat gentleman once remarked, "I ought to have the organ of Weight fully developed, because I am so heavy." Another gentleman of the same stamp also said, "I am sure that I have the faculty of Time, because I always know when it is dinner-time."

Now such absurdities as these would be altogether avoided by the use of names which should have only one signification, and which, if not to be found, should be invented. It is probably due to the employment of Latin names in geology, botany, and chemistry that these sciences are considered by many as belonging to a higher and more dignified standard than Phrenology. It is therefore highly desirable that the present names of the faculties be replaced by others less common in the Latin tongue, so that, for want of such names, Phrenology may no longer be regarded as inferior to those sciences, among which it should stand, if not first, at least *with* the first. The task of finding these names will not be attempted here, but left to some one who may be disposed and sufficiently learned to undertake it.

35. CAUSALITY. The organ of the faculty now to be considered was discovered by Dr. Gall, who, from finding it fully developed in several philosophers, called it "the power of Metaphysics." To this Dr. Spurzheim objected, because, as he says, "the name metaphysics does not designate a power of the mind." In the belief that the most active faculty in metaphysicians has for its object the investigation of causes, he called it "Causality," which name it has since retained.

As there are more fools than philosophers to be found with a development of this organ, and many philosophers to be found without a development of it, Dr. Spurzheim did very right in rejecting the word "metaphysics" as signifying its function; but that he did equally well in ascribing to it the power to "examine causes" will appear somewhat doubtful when it is considered that causes are never known—what is too often mistaken for causes being but the antecedents which precede sequents, as perceived by Eventuality and other observing faculties. But to trace sequents to antecedents is not to discover causes; these are as much concealed in the one as the other. To observe change succeed change is the function of the faculty Eventuality; and to retrace these back (which is undoubtedly the office of the same faculty) can furnish us with no information concerning causes. Of causes absolutely nothing is known, whatever notions we may theorise to the contrary. Some, by tracing effect to what is called

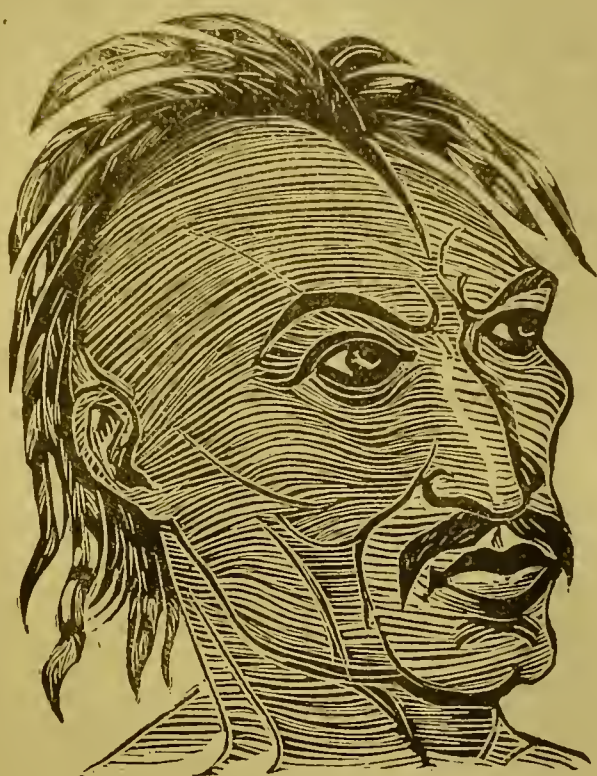
“cause,” have been led to recognise a great First Cause ; but in this they are not, in a logical point of view, more justified than others who retrace change to change *ad infinitum*. Hence it is, if we do not recognise our Maker and His will within ourselves—in our moral nature, and in those sentiments by which He commands us to be just, merciful, and reverent—our subtler intellect will surely fail to bring about this recognition.

Mr. George Combe thus endeavours to support the views of Dr. Spurzheim concerning the function of the organ called Causality:—“We have no notion of substance, except as it is unfolded to us in its qualities, yet we have a firm conviction that substance exists; and, in like manner, see only sequence in causation; yet we have an irresistible conviction that efficiency exists antecedent to produce the consequent. Individuality gives the first, and Causality the second conviction; and both produce belief in the *existence* of something, the essential nature of which is unknown.” This, though very ingenious, is by no means a satisfactory explanation of the matter. It would appear more feasible to suppose that the idea we have of efficiency or power existing in the precedent to produce the consequent succedent is merely inferred, and that *causation is not perceived nor recognised through a special faculty*. Neither is the comparison between substance and causation a just one, since the former is tangible to the sense of feeling, whereby we positively know of its existence. It will be remembered that the doctrine of the non-existence of matter, as sophistically propounded by Bishop Berkeley, was at once rejected by Dr. Johnson, who, kicking his foot against a huge stone with such force as to cause him to rebound from it, said, “I refute it thus.” This way of settling the question, though apparently violent, was by no means without judgment. But causation is imperceptible to our senses, and *cannot* therefore be *certainly known*, however firm may be our conviction of its existence, which is *but inferred, and not perceived*.

It is through the observing faculties we learn that every phenomenon or change in nature is occasioned by something; and hence is derived the idea of causation, and not through a special faculty. Since, then, causes are unknown, it is presumable that there is no faculty whose special function it is to comprehend causes.

What, then, can be the function of the organ called Causality? It has been said to give the faculty which induces to ask, “Why?” And this may be considered correct if the word “why” be omitted; for the function of the faculty is simply to inquire. Simple as this power may seem, it at least forms one of the dis-

tinguishing differences between the human intellect and the intellect of brutes; for what animals do not learn through their observing faculties, or *practically*, they do not seek to learn by inquiry, or *theoretically*. Metaphysics is but one branch of inquiry, in which the faculty Causality finds a grateful exercise. But because its organ was observed to be developed in metaphysicians, its sphere of exercise should not be limited to these; for it may be equally exercised in the study of any theory, whether of metaphysics, medicine, astronomy, geometry, &c. Before it reaches these scientific subjects, its exercise may be observed in



52.—INDIAN.



53.—NEGRO.

the questions which are continually being asked by children, and which are sometimes very simple, and sometimes very perplexing.

It is by the same faculty that fools are enabled to ask questions which puzzle wise men to answer; and hence we find the organ as fully developed in fools as in philosophers. Among some of the untutored Africans the organ is indeed more fully developed than those of the observing faculties; and, in conformity with this, we frequently find them inquiring about what they have not judgment enough to *comprehend*. The following is an instance which has already appeared in several anecdote-books:—"A Nigger's Idea of the Electric Telegraph.—At the railway depôt in Lowell, not long since, 'Look-a-hea, Jake,' said Sambo, his eyes dilating, and his rows of shining teeth protruding like a regiment

of pearls, 'look-a-hea, Jake; what you call dem ar?' 'What ar?' rejoined Jake. 'Dem ar I is pintin' to?' 'Dem ar is postes,' said Jake. 'What!' said Sambo, scratching his head, 'dem ar postes wid de glass?' 'Yes, de same identical,' returned Jake. 'Ah, but you sees dere are horzontal wires.' 'Well,' observed Jake, 'de postes supports de wires.' 'Gosh! I takes you, nigger,' ejaculated Sambo, clapping his sides, and both setting up a loud 'Yah, yah.' 'But what's de wires for?' said Sambo, after a pause. 'De wires,' replied Jake, completely staggered for a moment, and at a nonplus for a reply to the philosophic curiosity of brother Sambo; but, suddenly lighting up with more than nigger fire, he said, '*De wires is for to keep de postes up!*'"

The retreating forehead usual among the North-American Indians shows the organs of the observing faculties to be larger than those of the reflective faculties, and, in accordance with this type, we find them less theoretical and more practical; for when they take lessons in anatomy, as they sometimes do, they do not shut themselves in a library and read up the different authors on the subject, but they take a scalping-knife and learn practically. Dr. Benjamin Franklin says, in an essay concerning the savages of North America: "Our laborious manner of life, compared with theirs, they esteem slavish and base; and the learning on which we so much value ourselves, they regard as frivolous and useless. An instance of this occurred at the Treaty of Lancaster, in Pennsylvania, in 1744, between the Government of Virginia and the Six Nations. After the principal business was settled, the commissioners from Virginia acquainted the Indians by a speech that there was at Williamsburg a college, with a fund for educating Indian youth; and if the chiefs of the Six Nations would send down half a dozen of their sons to that college, the Government would take care that they should be well provided for, and instructed in all the learning of the white people. It is one of the Indian rules of politeness not to answer a public proposition the same day that it is made; they think it would be treating it as a light matter, and that they show it respect by taking time to consider it, as of a matter important. They therefore deferred their answer till the day following, when their speaker began by expressing their deep sense of the kindness of the Virginian Government in making them that offer; 'for we know,' says he, 'that you highly esteem the kind of learning taught in those colleges, and that the maintenance of our young men while with you would be very expensive to you. We are convinced therefore that you mean to do us good by your proposal, and we thank you heartily. But you, who are wise, must know that

different nations have different conceptions of things ; and you will therefore not take it amiss if our ideas of this kind of education happen not to be the same with yours. We have had some experience of it ; several of our young people were formerly brought up at the colleges of the northern provinces. They were instructed in all your sciences : but when they came back to us they were bad runners, ignorant of every means of living in the woods, unable to bear either cold or hunger ; knew neither how to build a cabin, take a deer, or kill an enemy ; spoke our language imperfectly ; were therefore neither fit for hunters, warriors, nor counsellors—they were totally good for nothing. We are, how-

ever, not the less obliged by your kind offer, though we decline accepting it ; and, to show our grateful sense of it, if the gentlemen of Virginia will send us a dozen of their sons, we will take great care of their education, instruct them in all we know, and make men of them.”

Mr. George Combe infers, from what he considers to be the function of the organ of Causality, that a want of development of it “renders the intellect superficial, and unfits the individual for forming comprehensive and consecutive

views, either in abstract science or in business.” According to this theory, the philosophy of Sir Isaac Newton should be regarded as merely superficial ; for the cast taken from his face shows the organ of Causality to be decidedly small.

Probably no author, by his writings, has shown himself to possess the power for forming consecutive views in a higher degree than has Fielding, in his work entitled “Tom Jones ;” and yet his portraits show the organ of Causality to be smaller than it may be found in the head of any other author. These facts, which are common enough, show plainly that the conclusions of Mr. Combe are fallacious ; and as his reputation should place him above being accused of unsound reasoning, the only alternative is to suppose that he has reasoned from false premises. For it is in reasoning as in arithmetic, if we find our accounts are incorrect, but are satisfied that our calculations have been accurately per-



54.—FIELDING.

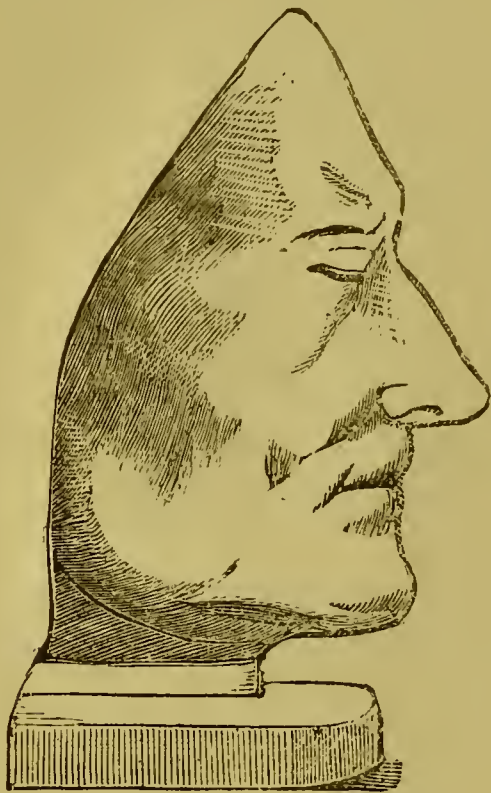
formed, we then very properly suspect something wrong in the items with which we started. Hence the importance of seeing that we start with correct principles, otherwise our conclusions, however carefully conducted, are sure to prove false. When this is considered, probably the many scruples will be excused which have been made here with regard to the exact fundamental nature of some of the mental faculties. But to return to the point. The organ of Causality is small in Newton, and, in accordance with what is here regarded as its function, we find his genius quite to coincide with this peculiarity ; for, instead of being guided by the speculations of others, he observed for himself, and so became the renowned original thinker he was. But had he acquired his knowledge through the faculty Causality, or from report, and not through his *observing* faculties (the organs of which are by his cast shown to be well developed), he could but have given to the world that only which was already known, instead of those original discoveries which won for him such an exalted reputation as a philosopher.

“ A goose, my grandam one day said,
 Entering the barn, pops down its head ;
 I begged her then the cause to show :
 She told me she must waive the task,
For nothing but a goose would ask
What nothing but a goose could know.”

The busts of Lord Bacon show the organ of Causality to be enormously large ; and though he is regarded as the father of English philosophy, it must be borne in mind that the ancients were its forefathers ; for many of the subjects on which he writes his essays are introduced with an “It hath been said,” “I remember to have read,” “It is reported by the ancients,” “It is affirmed by many,” &c. This at least shows that his wisdom consisted somewhat of other men’s thoughts. It is presumed that the inferences of which he was so full were formed by means of his observing faculties, the organs of which are not so well developed in his head ; and, in accordance with this, we find his judgment in many things somewhat absurd. His notions concerning witchcraft are illustrative of this ; as also his attempts to explain such matters that, as Lord Dundreary would say, “no fellow can understand.”

The faculty Causality gives simply the power to attain knowledge *theoretically*—that is, by hearsay or reading ; and on this power depends in no mean degree the successful practice of many of the arts, such as chemistry, engineering, mechanics, medicine, cooking, and others, in which a perfect knowledge is dependent on

the experience of several ages. It gives an aptitude to acquire knowledge by rote or rule, and thus tends to form the civilised, or, as it is sometimes termed, the *artificial* nature of man, as distinguished from the savage state. Without this faculty man would, in many respects, be unable to avail himself of the experience of others, and this would render his condition probably as stationary as that of brutes. But the knowledge acquired through Causality, unaccompanied by the observing faculties, would be little better than the knowledge the blind may have of colours, who may know that grass is green, or that roses are red from report, but not



55.—NEWTON.



56.—ANN OMEROD (Born Blind).

practically. In Ann Omerod, the exercise of whose observing faculties was to a certain extent impeded through blindness, and who was therefore dependent on others for her knowledge, we find the organ of Causality fully developed, while the organs of the observing faculties are weak; this organisation forming a striking contrast with that of Sir Isaac Newton, as also their respective intellects. By the cast of the blind girl it will be seen that a large organ of Causality, with want of development in the organs of the observing faculties, gives a loftiness to the forehead, such that by the uninitiated might be mistaken to indicate a profound judgment. But when we consider the nature of these respective organs, it will be understood that such an organisation may be, as it very often is, but the concomitant of a shallow mind.

It has been considered necessary to dwell thus much on this peculiar though common type of head, so that it may be seen how it is that Phrenology has many opponents among those who, with a superficial knowledge of its principles, doubt its accuracy, because they do not find intelligence in proportion with what they imagine to be a development of forehead.

Comparison and Causality are sometimes called reasoning and sometimes reflecting faculties. It is very proper that they should be distinguished by such terms from the other intellectual faculties, since it is by them alone that we are enabled to take into consideration the opinions or experience of others, or, as it is said, "listen to reason," and so, in a manner, to reflect before we act. But if for this purpose one of these terms may be considered better than the other, the preference should be given to the term reflecting, since reasoning is now recognised as a power of the observing faculties.

The preceding comprise the whole of the special faculties as recognised by Dr. Spurzheim, with the addition of that named Alimentiveness, the existence of which, as a faculty of the mind having its organ in the brain, cannot be doubted, when it is considered that it was discovered by three different gentlemen, of different parts, at one and the same time. Mr. T. Symes Prideaux says, in the *Anthropological Review* of January, 1869, "Dr. Hoppe, of Copenhagen, Mr. Crook, and Mr. George Combe independently arrived at the conclusion that the portion of the brain lying under the zygomatic arch is the seat of the instinct to take food. During twenty years that I have observed the development of this portion of the brain, I have never seen a case where a great depression in this region was not accompanied with more or less weakness in the digestive functions, and I entertain no more doubt of the connection than I do of my own existence." This nomenclature of the faculties of the mind is regarded by many phrenologists of the old school to be so thoroughly complete that they will not admit a single addition to or reduction from it. Notwithstanding this, there is at least one quality specially distinct from those of form, size, weight, colour, position or locality number, order, motion, time, melody, and language. As these qualities are distinct, and are perceived each through a distinct faculty, analogy would favour the inference that this other quality, which is distinct from all these, is perceived also through a special faculty. Such a faculty, however, was not, by the early propounders of Phrenology, recognised, nor even suspected. This faculty, whatever it shall be called, gives perception of will. We certainly may not understand the essential nature of the will; but

we cannot on this account preclude the existence of a faculty through which it is perceived, and by which alone it is known, any more than we can deny the existence of any of the faculties, because we do not understand the essential nature of their respective objects. The will, however subtle, is not so much so but that we know of its *existence*. We all know, more or less, what is meant by kindness, austerity, docility, ferocity, politeness, coarseness, cheerfulness, gloominess, anger, love, pride, vanity, humility, hatred, contempt, &c. We are all able to detect these feelings which constitute the will, and by which we are led to form our likes and dislikes for particular individuals at first sight. Indeed, so acute is this perception that we often regret being misled by dissimulation from our first impressions. We sometimes err in our estimate of others, but this is merely exceptional, and not general, and therefore affords no objection to the existence of a faculty to perceive will ; no more so than the fact that we sometimes mistake blue for green proves there is no faculty of Colour. That the will, however much it may be connected with matter, is a quality *distinct* from matter and its adjuncts, form, size, weight, colour, &c., admits of no doubt whatever. It may be said that the will is always found in connection with particular forms, and that it is indicated by certain actions ; but that neither forms nor actions on this account constitute the will, requires but common sense to understand. Nor can it be allowed (because of its connection with certain forms) that the will is perceived through the same faculty as that by which *forms* are perceived ; for as well might it be believed, because form, size, weight, and colour are invariably found together, that these qualities are all perceived through the same faculty. But the absurdity of such a notion is at once exposed by the fact that the same person who can readily distinguish configurations is often incapable of distinguishing colours, which would not be the case if these different objects were all perceived by *one* faculty. Then they would be all equally ill or well perceived, especially as these are primitive qualities, such that need not the aid of practice, training, nor education to make them distinguishable.

That this faculty or power to distinguish the will or disposition of others is innate, and not acquired by practice, is known by the fact that even very young children can detect, when strangers proffer their affection, whether it be genuine or merely assumed, and which they either accept or reject accordingly. Animals also possess this faculty, which further proves it to be innate and not acquired ; for by it the deer sees its enemy in the hound, the hare in the fox, the rat in the cat, the fowl in the hawk, the

sheep in the wolf, the horse in the lion, &c. The idea of the existence of this faculty is now proposed, not as being new or original, for the existence of such a faculty was long since proclaimed by Mr. L. N. Fowler, who names and defines it thus :—“HUMAN NATURE. Discernment of character ; intuitive perception of the motives and dispositions of strangers at the first interview.” Mr. Fowler considers its organ to be situated in the upper part of the forehead, between the organs of the reflective faculties and moral sentiments. In a work on Phrenology, published in America, 1842, by Messrs. O. S. and L. N. Fowler, is a chapter on unascertained organs, from which the following is transcribed :—

“It is admitted by phrenologists generally that certain portions of the brain remain as yet *terra incognita* ; and believing that every portion of the human frame and every part of the universe is made for and adapted to some useful purpose, and more especially since they have ascertained that every other portion of the brain is occupied by some organ whose office it is to perform the functions of some one of the mental faculties, they cannot resist the conclusion that each of these unascertained portions is occupied by a phrenological organ, adapted to the performance of the functions of some important, though unknown, faculty of the mind.

“One of these portions occurs between the reflective organs upon the one side, and Benevolence and Imitation on the other ; and one of the authors (L. N. Fowler), having made numerous observations and experiments upon it, is disposed to believe that it is occupied by an organ whose function is to furnish its possessor with an intuitive knowledge of *human nature*, or to enable him readily to perceive the *state of mind* or *feelings* possessed by others.”

According to this it appears that Mr. Fowler was led to suppose that this particular part of the brain is the organ of the faculty which he calls “Human Nature,” chiefly because no other function had been previously traced to it. He does not at all suspect that this perception of character is the function of a faculty to whose actual organ some other power may have been ascribed by mistake or insufficient experience ; such, for instance, as that called Individuality, whose supposed function has been shown to be not a primitive faculty, and which, for reasons to be stated presently, is rather to be regarded as the organ of this faculty, which gives perception of will, than that part of the brain to which it is ascribed by Mr. Fowler. It appears that the experience of Mr. O. S. Fowler was such as not to induce him to second the views of Mr. L. N. Fowler on this subject ; for it is

said in their work already alluded to: "The responsibility of making these suggestions in reference to these unascertained organs devolves upon L. N. Fowler, who has been making observations upon them for the last two years." Up to this time, and probably for some time after, Mr. Fowler was led by his observations to consider this organ of Human Nature to be situated between the organs of Causality and Imitation; but now (which does not say much for the care with which he then conducted his experiments) his charts give its situation between the organs of Comparison and Benevolence. This, however, does not prove that the situation which Mr. Fowler now claims for this organ is not its *proper* place. But what incontestably proves that the organ of this faculty which gives perception of character is *not* situated in this part of the head is the fact that most animals possess this faculty, whilst the brain of every species of animal is of such conformation as not to admit of the existence of a part corresponding with that part in the human brain which Mr. Fowler calls the organ of "Human Nature." Indeed, some animals possess this power in a very high degree. It is well known that the dog is able to discern the different humours of its keeper, by which it knows when to approach and when to keep aloof. An almost incredible instance of this power in the dog is related among the anecdotes of dogs published by Messrs. W. and R. Chambers. The following is a transcript of the same:—

"Sir H. Lee, of Ditchley, in Oxfordshire, ancestor of the late Earls of Lichfield, had a mastiff which guarded the house and yard, but had never met with any particular attention from his master. In short, he was not a favourite dog, and was retained for his utility only, and not from any partial regard.

"One night as Sir Harry was returning to his chamber, attended by his favourite valet, an Italian, the mastiff silently followed them up-stairs, which he had never been known to do before, and, to his master's astonishment, presented himself in the bedroom. Being deemed an intruder, he was instantly ordered to be turned out, which being complied with, the poor animal began scratching violently at the door, and howling loudly for admission. The servant was sent to drive him away. Discouragement, however, could not check his intended labour of love; he returned again, and was more importunate to be let in than before. Sir Harry, weary of opposition, though surprised beyond measure at the dog's apparent fondness for the society of a master who had never shown him the least kindness, and wishing to retire to rest, bade the servant open the door, that they might see what he wanted to do. This done, the mastiff,

with a wag of the tail and a look of affection at his lord, deliberately walked up, and crawling under the bed, laid himself down, as if desirous to take up his night's lodging there. To save further trouble, and not from any partiality for his company, this indulgence was allowed. The valet withdrew, and all was still. About the solemn hour of midnight the chamber-door opened, and a person was heard stepping across the room. Sir Harry started from sleep, the dog sprang from his covert, and seizing the unwelcome disturber, fixed him to the spot. All was dark. Sir Harry rang his bell in great trepidation, in order to procure a light. The person who was pinned to the floor by the courageous mastiff roared for assistance. It was found to be the favourite valet, who little expected such a reception. He endeavoured to apologise for his intrusion, and to make the reasons which induced him to take this step appear plausible ; but the importunity of the dog, the time, the place, the manner of the valet, raised suspicions in Sir Harry's mind, and he determined to refer the investigation of the business to a magistrate. The perfidious Italian, alternately terrified by the dread of punishment and soothed by the hope of pardon, at length confessed that it was his intention to murder the master, and then rob the house. This diabolical design was frustrated solely by the unaccountable sagacity of the dog, and his devoted attachment to his master."

Presentiments of approaching danger such as the above are no longer accounted for by supernatural means. Such powers are now traced only to the animal's close observation and watchful jealousy of disposition ; and this makes it evident that dogs have this perception of will in a high degree, but we find no development in that part of the head to which Mr. Fowler's experience points as the situation of the organ of this faculty.

If it is insisted upon that the head of the dog admits of a development in that part corresponding with Mr. Fowler's organ of "Human Nature," which is supposed to be between the organs of the moral sentiments and reflective faculties, then it may be assumed, with quite as much reasonableness, that, so far as their cerebral organisation is concerned, there is not a single human faculty which animals do not possess in a high degree. But, whilst the dog's head shows an utter want of development in this part, it shows the organs of Individuality and Locality fully developed, which gives it that abrupt elevation over the eyes which invariably characterises a *sensible* dog. There can be no doubt as to the function of these developed parts in the anterior region of the dog's head, when it is considered that the

two most powerful intellectual qualities of the dog are its "geographical" perception and its perception of will. And what further proves the connection between these powers and this part of the head—notwithstanding a large sinus intervening between it and the brain—is the fact that a dog wanting this elevation over the eyes is scarcely able to recognise its own keeper from a stranger, or to retrace its way home when but a short distance off.

By such facts, together with the experience of having observed for several years that this power of penetrating even into the most inward thoughts of others is invariably accompanied with a large development of the organ of Individuality; and from having also observed a great development where Mr. Fowler places his organ of "Human Nature" in many persons who are totally indifferent to



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the dispositions of others, the writer feels entitled to presume that the function of the organ called Individuality is to give this perception of will.

Mr. L. N. Fowler recognises another faculty, which he names and defines thus:—

"SUAVITIVENESS, OR AGREEABLENESS. Blandness and persuasiveness of manner; pleasantness of expression and address; insinuation; the power to say even disagreeable things pleasantly."

This Mr. Fowler originally considered to have its organ in that part of the brain which he now claims as the organ of "Human Nature;" but now he regards its organ to be situated on either side of that part. The affability of disposition that such a faculty would give is by many believed to arise, not from a special faculty, but from the manner in which our faculties generally are affected. For example, a covetous man's affability would depend in a great measure upon circumstances being favourable to his propensity to acquire or accumulate. The good-will of a vain man may be won by flattery, &c.

That Mr. Fowler should have observed a development in that part of the head over the organs of the reflective faculties, and that to be in proportion with the power to say disagreeable things pleasantly, must seem but natural, when it is considered that it is by the reflective faculties that man is rendered a conversable being. Probably benevolence, whose organ joins this part, may form an element in this power, and thus a development would be found without necessitating a belief in an additional organ.

To another that Mr. Fowler supposes to be a distinct faculty, and which was discovered by Dr. Vimont, he gives the following name and definition:—

“CONJUGALITY. Union for life; desire to pair; to unite for life; to love one of the opposite sex; to remain constantly with, and faithful to, the loved one.”

This by the early students of Phrenology would have been regarded as a complex feeling, arising from the combined exercise of Amativeness and Adhesiveness. It is between the organs of these faculties that the supposed organ of this feeling is believed to be situated.

When we consider the nature of the faculties Amativeness and Adhesiveness, and the proximity of their organs to each other, it seems feasible to expect this third feeling, “Conjugality,” to arise from their joint exercise, without regarding it as a *primitive faculty having a distinct organ*. Mr. Fowler, however, believes otherwise, because he thinks it explains the constancy between the sexes among certain animals, such as doves; and the reverse among others, such as fowls. But that this difference depends rather upon a difference of constitution, or different degrees of activity of the *same* faculty, than upon a *distinct* faculty, is somewhat proved by the fact that the “course of true love” is often ruffled by the stimulating effect of wine upon the passions. Other causes, such as a syren’s glance or a maiden’s sigh, will sometimes disturb the tranquillity of old lovers. In short, even the most honourable love may give place to a licentious conduct from very trivial causes, which would not be the case if it depended upon the presence or absence of a particular faculty; for then a man would be either naturally faithful to the connubial state, or naturally a rake, and not change from one to the other by turns.

VITATIVENESS. This name has been given to a part of the brain situated near the mastoid process, and is supposed to be the organ of the love of life. Mr. George Combe, in reference to this faculty and its organ, says: “Different individuals possess the love of life in very different degrees. In some it is so strong that they view death as the greatest calamity, and the idea of death is absolutely insupportable to their imaginations. Others, again, are more indifferent about life, and do not regard its termination as an evil; so far as the mere pleasure of living is concerned, they are ready to surrender it with scarcely a feeling of regret. I have found these feelings combined with the most opposite dispositions and circumstances. The ardent lovers of life were not always the healthy, the gay, and the fortunate, nor

were those who were comparatively indifferent to death always the feeble, the gloomy, and the misanthropic; on the contrary, the feeling was found to exist strongly or weakly in opposite characters indiscriminately.

"I infer from these facts that there is a primitive instinct, connected with a particular organ, which gives the love of life. It is conjectured to lie at the base of the middle lobe of the brain, towards the mesial line. Dr. Andrew Combe found the convolution referred to very large in a lady who was remarkable for the strength of her attachment to life. Dr. Vimont considers that he has ascertained the seat of the organ in the lower animals, and its position in them corresponds with that observed by Dr. Combe in man."

SUBLIMITY. Fondness for the grand, sublime, and majestic; the wild and romantic, &c. This feeling was by Dr. Vimont supposed to arise from a primitive faculty distinct from Ideality. By many it is not unreasonably thought to emanate from a combination of the faculties Cautiousness and Ideality; the one giving a fearful sense of the terrific, the other connecting with it a beauty. And thus a sense of the beautiful or grand may be excited by the vastness of a wilderness, by the thundering of the heavens, or even by our imaginings of the flames of hell. The organ of this supposed faculty is believed to lie between the organs of Cautiousness and Ideality.

CONCENTRATIVENESS, or what metaphysicians call the power of application, was by Mr. Combe supposed to be the effect of a primitive faculty of the mind. He says, "It gives the facility of concentrating the feelings and thoughts, without the tendency to be distracted by the intrusion of emotions or ideas foreign to the main point under consideration."

An unknown writer in the *Phrenological Journal*, who, though inclined to believe in the existence of such a power of the mind, objects to Mr. Combe's definition of it, which he considers is a description rather of an operation of the power than a statement of the primary element which gives rise to such operation.

Mr. Combe says, "The organ of Concentrativeness is situated immediately above Philoprogenitiveness, and below Self-esteem. Observation," he says, "proves this is a distinct organ, because it is sometimes found large when those lying above and below it are small, and sometimes small when these are large."

Dr. Gall did not discover its function. Dr. Spurzheim objected to the ideas of Mr. Combe concerning Concentrativeness, and states that his experience is in contradiction to them; "and that

Concentrativeness cannot possibly be a primitive faculty, since it can neither act alone nor appear diseased singly, and since its very existence only becomes apparent by the presence of other powers directed to one object." To this Mr. Combe says, "There are various faculties which cannot act alone. Thus, Firmness presupposes the activity of other powers; we persevere in passion, in love, in hate, or in study, but cannot well persevere in mere abstract perseverance. Cautiousness causes us to fear; but we always fear something which depends on other faculties, and rarely experience abstract fear itself. Concentrativeness, therefore, is not singular in acting alone."

In these remarks Mr. Combe is undoubtedly in error, for it is well known that obstinacy and stubbornness are the effects of diseased Firmness; and the fact that some persons are naturally obstinate or stubborn without cause or provocation (though perfect in every other respect), clearly proves that Firmness may be diseased singly, and may act alone, in so far as it is possible for any faculty to do so. That excessive Cautiousness gives rise to *groundless fears*, and to fears which intrude themselves in spite of the *judgment*, by which we know that they are without foundation, also proves that this faculty may be diseased singly, and act alone. Mr. Combe, however, endeavours to establish a reconciliation between his views and those of Dr. Spurzheim by saying, "There appears to be nothing in the limited notions of Dr. Spurzheim concerning Inhabitiveness, inconsistent with the more extensive views now taken of the functions of this faculty."

By what mode of reasoning Mr. Combe could have been led to suppose that the love of home is a limited, and the power of application a more extensive exercise of the same faculty, seems difficult to understand. That he should have observed the power of concentrating the mind upon a particular subject or object at will to be in proportion to the development of the organ of Inhabitiveness may be perfectly true, since the faculty Inhabitiveness gives the disposition to "settle down," or that condition so favourable to mental application; but he is not therefore justified in so peremptorily insisting that such a power is the effect of a distinct faculty. Mr. Combe also says, "Dr. Vimont thinks that the space between Philoprogenitiveness and Self-esteem includes two organs—the *upper* being that of *Inhabitiveness*, and the *lower* that of *Concentrativeness*." Mr. Combe adds, "I have seen cases which lead me to attach considerable weight to Dr. Vimont's views." Mr. Fowler, in his long experience as a phrenologist, has never found reason to believe otherwise than

that Concentrativeness is situated *above*, and *not below* Inhabitiveness, which, in some degree, shows the unreliableness of the observations of both Dr. Vimont and Mr. Combe on this point. Though Dr. Vimont regarded what Mr. Combe call Concentrativeness as a primitive faculty, the French phrenologists generally were much opposed to it, and considered its introduction rather as an imposition ; and by them it was very properly judged to be but one of the modes of exercise of the faculties. M. T. Thoré, in his "Dictionnaire de Phrénologie," says, in reference to Mr. Combe's Concentrativeness, "Cette innovation que les phrénologistes Français n'ont pas acceptée, est contraire aux principes même de la doctrine, puisqu'elle place parmi les facultés un de leurs modes d'exercice l'attention."

But when it is remembered that Mr. Combe says he believes Inhabitiveness and Concentrativeness are *one faculty*, and that he is also willing to accept Dr. Vimont's belief that they are *two faculties*, it seems as if he was willing to agree to anything rather than resign the belief that he discovered the power of application to be a primitive faculty of the mind, having its organ in the brain, but which is nothing more than a mode of activity of the mind, to which certain cerebral organisations are favourable, and are more particularly dependent on the temperament. Indeed, so influential is the effect of the temperaments upon the exercise of the mental faculties, that their consideration forms a very important part in the study of Phrenology. The temperaments, therefore, will be considered in due order.

After becoming acquainted with the situation and the functions of the cerebral organs, it is necessary, before attempting to read characters phrenologically, to be aware that the action of one faculty is sometimes modified by that of another ; consequently, on finding a development of the organ of Destructiveness, it must not be regarded as an infallible proof of cruelty, because Benevolence will sometimes intercept and counteract the excesses that might arise from an unchecked activity of that propensity.

The same applies to the moral sentiments, whose manifestations are sometimes modified by the intervention of the propensities. Thus Benevolence gives the emotion of sympathy, which disposes to acts of philanthropy ; but sometimes this feeling, when curbed by Acquisitiveness, dwindles into a sort of "pity without relief."

In some instances these opposite feelings act separately, as may be seen in those persons who are of a kind disposition at one time and the reverse at another.

“Virtuous and vicious every man must be,
Few in the extreme, but all in the degree ;
The rogue and fool by fits are fair and wise,
And even the best by fits what they despise.”—*Pope*.

This changefulness of character is accounted for by that principle or doctrine of Phrenology which proposes that the brain is not a *single organ*, but a congeries of several organs, which are sufficiently distinct from each other to act either together or separately. Though many have expected that a rising and falling among the organs should take place with such changefulness of disposition, the idea cannot but appear absurd now that it is known to depend on the *exercise* of some of the organs during the repose of others.

It is also advisable not to conclude that a person is addicted to coarse or vicious habits though the head may partake of the lowest moral type ; for there are many callings in which the faculties of the animal class may be not only legitimately but honourably employed. Indeed, there are some persons of the highest respectability with heads even inferior in form to those of many of the criminals that have been hanged. It should also be known that there is not a faculty, even among the highest, that may not be perverted or misused ; and as no degree of development among the organs of the mental faculties can afford any information as to whether such faculties will be or have been legitimately or otherwise employed, it is but absolute folly to expect that a man's conduct can be known by the shape of his head. It is only among those who do not understand Phrenology that anything so extravagant is expected from it, and those who denounce it in consequence of such pretensions do nothing more than expose their ignorance of its principles.

All that can be known of the mind from the shape of the head is the *relative power* of the faculties to each other, and, to a certain extent, what a man is *capable of doing*, but not what he *will* do. To know what a man will do is beyond the power of the phrenologist, and though it may be *guessed*, it is never *known*.

As those faculties that have been most exercised yield the greatest pleasure, it is very probable that our future conduct will be *influenced* by them ; yet it is not unusual for those feelings that have for a long time borne sway to give way to others of an almost opposite nature. That fearful feeling of spitefulness with which some men pursue and harry their rivals to death, has sometimes given place to a remorse more terrible than death itself. Such changes are sometimes as sudden as a sword-thrust or the

click of a trigger. An occurrence somewhat similar to this is shown by Shakespeare, of "Timon of Athens," whose unbounded friendship was, after he discovered the deceitfulness of his pretended friends, succeeded by a feeling of deadly hatred, which he displayed by cursing not only those who had deceived him, but everybody. In this state he is represented to have continued till death. As it is believed that Shakespeare did not misrepresent human nature, it may be inferred from such instances that it is impossible for the phrenologist to tell what the mind of to-day may be to-morrow. In this manner does Phrenology proclaim its *unalliance* with astrology, palmistry, and other such ignoble fortune-telling arts.

Though it is recognised as a rule by phrenologists that the larger an organ the greater will be the power of its function, yet we are not entitled by this rule to suppose that a person with a large head will always manifest greater mental force than a person with a *small* head; for this rule limits us to judge of the power of the mental faculties from different organs in the *same head, and not by the size of different heads*. Large heads do not always contain the greatest minds; but, on the contrary, they are often surpassed in this respect by small heads. This fact certainly necessitates experience, and offers difficulties to the learner, but it does not necessarily obviate the conclusions of the phrenologist; for, by a due attention to the constitution or temperament (by which the activity of the mind, like that of the body, is influenced), it is quite possible, and to an experienced person quite easy, to distinguish the drowsy from the active minds.

Perhaps no point claims more attention than this which regards the temperaments; for, to be enabled to form correct estimates of the power of the mental faculties, it is of consummate importance to observe strictly the temperament, and make proper allowances for its influence on the mind.

Four kinds of temperaments are recognised.

I. THE LYMPHATIC OR PROCRASTINATING TEMPERAMENT, in which the *secreting glands* are the most active portion of the system. This is distinguished by corpulency, and is indicative of physical and mental languor. This temperament is never found to exist in a pure state among geniuses, nor even to predominate, unless accompanied by a large brain, as in the case of Dr. Johnson, and even he seems to have been slow in his labours, for by the time he had completed his dictionary he had so exhausted the patience of Millar, the publisher, that the latter acknowledged the receipt of the last sheet in the following terms:—

"Andrew Millar sends his compliments to Mr. Samuel John-

son, with the money for the last sheet of the dictionary, and thanks God he has done with him."

To this reproach the doctor answered thus :—

"Samuel Johnson returns his compliments to Mr. Andrew Millar, and is very glad to find (as he does by his note) that Andrew Millar has the grace to thank God for anything."

2. THE SANGUINE OR ACTIVE TEMPERAMENT, in which the *arterial* portion of the system is most active, is known by a florid or fair complexion, and light hair. It imparts to the character activity, zeal, and enthusiasm. Persons of this temperament, by being over-zealous, frequently undertake more than they can accomplish. Hence it is that red-haired persons are sometimes believed to be deceitful and faithless, but which defects are more often constitutional than intentional. The great love of activity among persons of this temperament unfits them for sedentary occupations, which to them is more burdensome than the most toilsome exercise. This temperament is, therefore, unfavourable to deep mental application or continuity of thought.



58.—DR. JOHNSON.

3. THE BILIOUS* OR PERSEVERING TEMPERAMENT, in which the muscular portion of the system predominates in activity, is evinced by strongly-marked and firmly-set features, a swarthy complexion, dark hair, and well-developed muscles. (See cut on page 96, Caracula.) It gives the constitution great power of endurance, fits it for both mental and physical exertion, and for extensive undertakings. Probably it was the effects of this temperament that Mr. Combe mistook for the promptings of what he calls the faculty of Concentrativeness. (See page 90.)

4. THE NERVOUS OR SENSITIVE TEMPERAMENT, in which the *brain and the nervous system* are most active. It is characterised by sharp features, thin lips, small muscles, pale complexion, and sometimes delicate health. Persons of this temperament have very acute perception, and are very susceptible; so much so as to be often overpowered by the intensity of their own feelings.

* This term, in this case, is not used in allusion to the disease bile.

It is where this temperament prevails that we find small heads with *great minds*, as in the case of Alexander Pope.

It very rarely occurs that there is not a mixture of the temperaments in each person; in fact, there should be relative proportions to constitute harmony of organisation. They will, of course, modify each other. The nervous with the sanguine produces mental as well as physical activity. The bilious added imparts continued perseverance; and with the lymphatic, that desire for easy enjoyment which is necessary that the system may recruit and regain its power for exertion.



59.—CARACULA.

It is, however, on reviewing collectively the different faculties or principles of the mind, whose consideration individually has formed the subject of the preceding pages, that we behold a system presenting itself which assumes to be the most complete and perfect philosophy of the mind extant. Indeed, it is by Phrenology alone, the *only* system of mental science founded upon nature, and therefore the most reliable,

that we learn with the most perfect degree of certainty that the *human mind* consists of comparatively a small number of innate, simple, and uncompounded faculties or principles of action, in which all the infinitely diversified operations or characteristics of the human mind have their origin. It has been the province peculiarly of the phrenologist, by careful, patient, and disinterested research, to ascertain upon the most warrantable evidence possible that these faculties perform their functions by means of cerebral organs, whose development is found to be in proportion to the power of the said faculties. A few demonstrable facts which materially substantiate the soundness of these observations are thus given in a paper entitled "Physiognomy, Popular and Scientific," as read by Dr. Donovan before the Ethnological Society in London:—

"*First*—If the head of a male adult of the ordinary size be

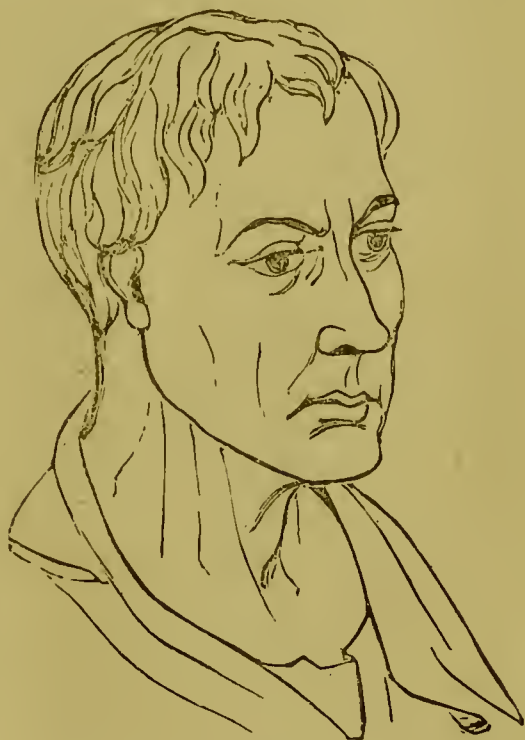
under *twenty inches* in horizontal circumference about where the hat touches, such person is certain to be, if not actually idiotic, so *feeble in mind as to be unable to earn a living in any calling requiring ordinary intelligence.*

“*Second*—When the circumference of an adult male head is not more than nineteen inches, marked imbecility is certain; whilst a circumference of eighteen inches *necessitates absolute idiocy.*

“*Third*—An adult male head only twenty-one inches round never can succeed in any arduous and *competitive* work, be the form and temperament of the brain what it may.

“*Fourth*—When the circumference of the head exceeds twenty-five inches—a rare case, twenty-four inches being the normal highest circumference—it becomes probable that there was originally disease of brain, or that disease exists. Perfect health of brain and normality of mind are incompatible with a circumference of twenty-seven inches.” Dr. Donovan adds—“That the head, or brain, is subjected to a law of width is shown by the fact that lack of width—six inches being the full average—is accompanied by deficient mental energy and love of exertion; whilst the opposite condition, even to a dangerous extent, is found to result from undue breadth of head.”

“It can be shown that length and height of head are very important items in cerebral physiognomy,” since in this manner we find the principles of Phrenology, which are not the inventions of genius, but which have their foundations in nature, capable of submitting their integrity to the test of mathematical measurement by rule and compass—a mode of examination far more satisfactory than those afforded by the deductions of logic. What objection, arising from the dictates of common sense, can possibly be offered to the phrenologist to regard as a science that system arising from his discoveries which affords a key to the mental constitution of man, and gives a facility of tracing the diversities of human character and intellect to their source, and far surpassing any other system that has yet appeared?



60.—ALEXANDER POPE.

But while Phrenology promises to be of so much service in the most important task of pointing out to each man his proper place in society, on filling which his happiness so much depends, it will be found useful also, in no mean degree, to aid the naturalist in arranging and classifying the different creatures of the animal kingdom according to their *intellectual* order ; a pursuit which requires to be conducted with the greatest possible care and attention. Indeed, the errors into which naturalists have sometimes fallen, and which of late have reflected so much disgrace upon their labours, might have been effectually avoided had their studies been assisted by a proper knowledge of the principles of Phrenology ; for then, before attempting to impose upon the world the trashy and fulsome belief that man is but a development of the ape, it would have been seen by comparing the brains of each, that the one possesses a variety of parts, especially in the convolutions which form the organs of the moral sentiments and the reflecting faculties, which are *wanting in the other*. The great chasm thus presented between them must necessarily quash the pretensions which claim the *relationship* of the ape to man. Development presupposes a rudimentary state, otherwise development is impossible. The oak does not develop itself from nothing, however favourable the conditions ; the acorn is an indispensable requisite. The bird is a development of the egg, without which there would be no bird. As, then, the organs of the moral sentiments and the reflecting faculties do not exist even in a rudimentary degree in the monkey brain, the evidence is as clear as possible that humanity does not owe its origin to the monkey tribe.

It is upon certain facts observed by phrenologists to be constant and invariable that the theoretical principle of Phrenology is founded which proposes that the mental faculties are innate, natural—"born, not made." From this principle—which admits of the mind's connection with the brain being disregarded—it is assumed that a faculty is *not created* by the conditions that favour its development. For example, light is essential to the perfect development of the eye, but the sun might shine for ever on a living body without producing an eye. It is the same with the mental faculties. By exercise, training, education, and experience they may be *developed* but not *produced*. If the principle is not within, all culture from without will be ineffectual.

An advocate for the development theory says, "The difference between mind in the lower animals and in man is a difference of degree only, and not a specific difference ;" and he makes an ingenious but delusive attempt to prove this by saying, "We see

animals capable of affection, jealousy, envy ; we see them quarrel, and conduct quarrels in the very manner pursued by the ruder and less educated of our own race ; we see them liable to flattery, inflated with pride, and dejected by shame ; we see them as tender to their young as human parents are, and as faithful to a trust as the most conscientious of human servants. The horse is startled by marvellous objects, as a man is ; the dog and many others show a tenacious memory. The dog also proves himself possessed of imagination by the act of dreaming. Horses finding themselves in want of a shoe have, of their own accord, gone to a farrier's shop where they were shod before ; cats closed up in rooms will endeavour to obtain their liberation by pulling a latch or ringing a bell." But in all this there is nothing which may not be accounted for by the faculties which are by the phrenologist regarded as common to these animals.

If, however, it is insinuated that the horse possesses the peculiarly human sentiment of wonder because he is startled by what are here called *marvellous* objects, it will be necessary to observe that the horse is thus affected through its extreme sense of fear, which is excited by any mean thing to which the animal is unused, or that may conspicuously present itself. This shying of the horse at such things is no proof that he possesses that sentiment to *appreciate* the marvellous, and through which man is *charmed* with what at the same time *affrights* him.

Neither does this enumeration of exercises arising from the faculties which animals possess in common with man, prove that "the difference between mind in the lower animals and in man is a difference of degree only, and not a specific difference." That the dignified strut of the cock upon his dunghill, his courtesy towards the hens, and the valiant manner in which he defends them, are operations of principles by which are distinguished both the gayest cavalier and the most valorous knight, no sensible person will dispute. Though it is equally allowable that with animals as with man—

" Sweet is the task to feed, caress, instruct
Their infant progenies,"

and that the peacock's pride, the fox's cunning, the lion's rage, and the timidity of the deer are emanations from principles the same as those which in part constitute the human mind, yet does Phrenology most distinctly show that all these operations may be conducted without either morality or reflection.

To show, then, that man possesses faculties in common with animals, is not to prove that the faculties of the reflecting powers

and the moral sentiments are inherent in animals. Neither is this proved by mistaking the operations of one class of faculties for those of another, between which there is not unfrequently a very strong resemblance. Sometimes the most opposite principles will move to the same actions. Some men, from a feeling of piety, do just as others do from a spirit of revenge. In like manner, the same circumstances excite in some men pity, in others disgust. This difference arises probably from their various experiences; but in whatever way it may be accounted for, the student cannot be too guarded against mistaking the operations of one faculty for those of another. The same writer also says, "It has several times been observed that in a field of cattle, when one or two were mischievous, and persisted long in annoying or tyrannising over the rest, the herd to all appearance consulted, and then, making a united effort, drove the troublers off the ground." From this it might be assumed that animals have, in at least a small degree, those faculties termed Comparison and Causality, whose especial functions—as shown in a former part of this work—enable man to communicate ideas. But, the phrenologists, from being unable to find even the germs of the organs of these faculties in the brain of the ox, would naturally conclude that this *consulting* together among these animals is achieved through the observing faculties, whose exercise frequently manifests itself in actions much resembling those of the higher faculties. Instances of this kind among the emotional faculties are very common. When food has become unacceptable to a delicate palate it is sometimes given to the needy, not from a benevolent motive, but to gratify the acquisitive propensity, which prompts to "waste not." It is from the eighth edition of the work entitled "The Vestiges of the Natural History of Creation" that the above remarks in support of the "development theory" are quoted. In the same work it is further stated that, "Although there is no heritage of accumulated knowledge amongst the lower animals as there is amongst us, they are in some degree susceptible of those modifications of natural character, and *capable of those accomplishments which we call education*." It is true that animals are susceptible to the influence of education, when it is applied to the faculties which they possess, but then only to a very limited extent, beyond which it becomes ineffectual. It is as impossible to teach a pig good manners—such as to eat gracefully, and not put its foot in the trough—as it is by the forcing influence of the hothouse to procure pineapples from a gooseberry bush. The fact that no register is kept amongst animals to record their proceedings is a very good proof that they have not the faculties

necessary for such a purpose, to say nothing of the laughableness of the idea. In the work last quoted, many allusions are made to individual cases in exceptional instances, which appear to make feasible the idea that the condition of man has been arrived at by a series of progressive steps upwards through different stages from the zoophyte, or lowest form of animal life. Cuvier, in reference to this subject, says, "The following objection has already been started against my conclusions:—Why may not the presently-existing races of land quadrupeds be mere modifications or varieties of those ancient races which we now find in the fossil state, which modifications may have been produced by change of climate and other local circumstances, and have since been raised to the present excessive difference by the operation of similar causes during a long succession of ages?"

"This objection may appear strong to those who believe in the indefinite possibility of change of form in organised bodies, and think that during a succession of ages, and by alterations of habitudes, all the species may change into each other, or one of them give birth to all the rest. Yet to those persons the following answer may be given from their own system: If the species have changed by degrees, as they assume, we ought to find traces of this gradual modification. Thus, between the *palæotherium* and the species of our own days *we should be able to discover some intermediate forms, and yet no such discovery has ever been made.* Since the bowels of the earth have not preserved monuments of this strange genealogy, we have a right to conclude that the ancient and now extinct species were as permanent in their forms and characters as those which exist at present; or, at least, that the catastrophe which destroyed them did not leave sufficient time for the production of the changes that are alleged to have taken place."

After making some observations on the varieties produced in animals by domestication, and by the mixture of breeds effected by the contrivance and under the influence of man, and showing that all these varieties are perfectly insignificant and never amount to an alteration in the original and proper specific type, Cuvier comes to the conclusion "that animals have certain fixed and natural characters which resist the effects of every kind of influence, whether proceeding from natural causes or human interference; and we have not the smallest reason to suspect that time has any more effect upon them than climate."

In whatever way this subject is settled by naturalists of the present time, the history of man as gleaned from his works, does not show he possesses *more mental faculties* now than he did in the

earliest ages. While copies from the sculptures of the ancients are chosen in our schools of art as the best models to guide the taste and develop the genius of the student, the literary productions of the ancients are held in the highest estimation, and form the principal subjects of study in a classical education. Dugald Stewart says, "There are few men to be found among those who have received the advantages of a liberal education who do not retain through life that admiration of the heroic ages of Greece and Rome with which the classical authors once inspired them." Even the very ruins of their cities show that in the science of architecture, both for grandeur and elegance of design, the ancients have never since been equalled in any age or country; while the enormous blocks of stone used in rearing their edifices argue very forcibly an acquaintance with the use of engines of the most potent kind. Not to take into account the Pyramids of Egypt, "than which nothing so simple was ever so sublime," and other fabrications which are still held as the wonders of the world, these *facts* alone go a long way to show that no addition has been made to the intellectual endowments of man since he first appeared upon the earth. It certainly cannot be denied that of late years much progress has been made in several departments of scientific knowledge; yet it is from but a superficial consideration of the matter that such progress is supposed to have resulted from faculties in us superior to those of our predecessors. Much of the advancement, both in the arts and sciences, which is ascribed wholly to man's ingeniousness, is more properly due to some happy or accidental discovery of previously unknown materials or principles in Nature. In the laboratory how often has the chemist by mere accident made such discoveries as years of experimentalising would but have removed from his expectations? "It has been often remarked," says Dugald Stewart, "that there is a mutual connection between the different arts and sciences, and that the improvements that are made in one branch of human knowledge frequently throw light on others, to which it has apparently a very remote relation. The modern discoveries in astronomy and in pure mathematics have contributed to bring the art of navigation to a degree of perfection formerly unknown. The rapid progress which has been lately made in astronomy, anatomy, and botany, has been chiefly owing to the aid which these sciences have received from the art of the optician." The superior ingeniousness displayed at the present time in architecture is due somewhat to the mode now known of casting iron on a scale larger probably than was known to the ancients.

When we thus learn that much of the progress, both in the

arts and sciences, is, in many instances, due to the knowledge of laws or principles whose very simplicity serves rather to elude than aid man's search, and thus render their discovery less possible by art than chance, it may probably occur to us to be an improper claim to arrogate to ourselves the credit of possessing *superior* mental powers to those of the ancients, because of late we have become wise in a few things in which we are not quite certain but that the ancients were better versed than ourselves. The philosophical speculator may also alter his views with regard to the world being constituted entirely on principles of progressive development.

The support which these considerations tend to give to the phrenological mode of dealing with the question of man's relationship to the ape, cannot be regarded otherwise than as affording good proof, not only of the truthfulness, but also of the great *utility* of Phrenology in such investigations. Having truthfulness for its recommendation, the study of Phrenology, to a mind truth-loving and disposed to inquiry, cannot fail to be interesting in the highest degree, since it comprehends the study both of human and animal nature.

“Happy is he who lives to understand,
 Not human nature only, but explores
 All natures, to the end that he may find
 The law that governs each ; and where begins
 The union, the partition where, that makes
 Kind and degree among all visible beings ;
 The constitutions, powers, and faculties
 Which they inherit, cannot step beyond,
 And cannot fall beneath ; that do assign
 To every class its station and its office,
 Through all the mighty commonwealth of things ;
 Up from the creeping plant to sovereign man.
 Such converse, if directed by a meek,
 Sincere, and humble spirit, teaches love ;
 For knowledge is delight ; and such delight
 Breeds love ; yet, suited as it rather is
 To thought and to the climbing intellect,
 It teaches less to love than to adore ;
 If that be not indeed the highest love.”—*Wordsworth.*

“Not small the joy to feel the springs of thought
 In playful notion, and the beams of truth
 Swift-flashing through the chambers of the soul ;
 Dispersing all the shades of error, doubt,
 And ignorance ; while knowledge, like the sun
 In th' orient, comes with revelations bright
 Of order, harmony, profound design,
 And universal love.”

—“*The Pleasures of Benevolence*,” by *W. H. Drummond, D.D., M.R.I.A.*

It is for the knowledge it affords of man's self that Phrenology proves most advantageous. By this science we learn that the logician, the orator, the poet, the painter, the sculptor, the musician, the moralist, and the divine has each this *distinguishing* type. In this we have a physical proof that particular professions employ *particular* classes of faculties, and that it is impossible to exercise exclusively in any one profession without leaving some of the powers of the mind dormant. The inference, therefore, is that eminence in any one particular department is attained mostly by the sacrifice of many of the noblest powers of the mind. Hence it is that those men who apply themselves wholly to *one* pursuit, appear either foolish or monstrous, and much out of place when not engaged in their own peculiar occupation. This fact may serve to explain somewhat how it is that such absurdities and atrocities form part of the lives which are recorded of most great men who have sacrificed the perfection and happiness of their nature to the amusement and instruction of others. It is recorded that a man once visited a physician in Paris to seek advice concerning intense and unbearable feelings of depression and melancholy, which he thought did not arise from ill-health, as he felt perfectly well in every other respect. "Then," said the physician, "yours is an affection of the mind, and beyond the power of my art to relieve. What I would recommend is that you go to the theatre and see Carlini, the celebrated Italian comedian; and if he does not dispel your gloom, your case must be desperate indeed." "But," said the man, much to the dismay of the physician, "I am Carlini; and while I make all Paris ring with laughter, I am myself dying of chagrin." This instance shows that happiness is not secured even by giving ourselves entirely to merriment.

When we consider that we have been endowed with such a variety of faculties which minister not only to our needs, but also to our *pleasures*, it seems impossible to believe that it was ever intended that man should confine his attention entirely to one pursuit, and in so doing neglect to improve the whole of those faculties which were given for his welfare and happiness. It would seem, also, that the desolate gloom which attends the leisure hours of most geniuses is intended purposely to check such grievous wrong—a wrong equal only to that of a man having his eyes put out on purpose to improve the sensibility of his touch.

It is certainly true that our exertions should be limited if we wish to benefit society by our labours, but assuredly not to the extent of neglecting those duties which a man owes to himself of rendering himself happy as an individual, as also a respectable

and useful member of society. Instances are not wanting where men have attained the highest degree of perfection in their professions and pursuits, and yet have found time to divert themselves in various and opposite engagements. Michael Angelo, the most eminent of sculptors, used to practise the art of painting, write poetry, and play the violin. The Rev. Sydney Smith was not incapacitated as a divine because he officiated as a wit, *Edinburgh Reviewer*, architect, and a money-lender. Nor was Edmund Burke a bad orator because he used to "knuckle down" on all-fours, and ride the children about on his back.

It should not, therefore, be the sole object of any man to become eminent in one *particular* calling; but his studies and pursuits should be varied, and of such nature as to develop and perfect, not a few, but the whole of the faculties of the mind.

It would be beside the object, and exceed the limits of this work, to attempt to propound here what would be the best mode of cultivating the mind to the full extent of its capacity. There is no doubt, however, but that so desirable an end might be accomplished by a system of education founded upon a philosophical consideration of all the various faculties or principles of the mind.

As in the phrenological nomenclature of the faculties is included one which gives a religious tendency, the fact is clear that any system of education in which *religious instruction* is not included would be certainly *incomplete*, notwithstanding that the contrary has of late been much contended.

In whatever way it may be accounted for, the fact is undeniable, that most persons have a predisposition or natural tendency to follow particular pursuits. As such persons frequently excel in such pursuits, apparently without effort on their part, the chief object of education in such cases should be, not so much to promote these powers, as those in which a natural deficiency is most to be apprehended. And it would certainly be not without a philosophical foundation to accommodate the education of individuals to their peculiar predilections.

Nor is it mere mountebank talk to say that Phrenology would render valuable assistance in ascertaining which are the active and which the latent faculties, and which it is so necessary to know in determining what course of education to adopt to suit each individual mind. A series of essays addressed to each of the faculties would prove invaluable in developing the mind; but lest these should fail to produce but an admiration for the object of their intention, it is better that all precepts—at least, as far as possible—should be of a *practical* character. Such training could, of course, be better managed by the nurse than at college, and would be the

fittest and most noble employment in which ladies who wish to become useful and valuable members of society could occupy themselves.

If we but consider that upon training the mind greatly depends not only the happiness of individuals but the safety of nations, it will be easy to conceive that the office of tutor is one of great trust, and therefore ought to be filled by trustworthy servants. And as the duty of training up a child "in the way it should go" is one from which few women are exempt, the necessity of their being qualified to discharge such a duty properly should render the education of women one of the highest objects of human life.

If that theory be true which holds that the mind is as a sheet of blank paper, on which can be written any character at will, it cannot be denied that every mother should be capable of directing the infantine mind aright in the first place, since, as on paper, it is sometimes very troublesome to erase what is wrong or imperfect. But if the hypothesis which represents the mind to be at first a mere blank, and so very impressible, be objected to as untenable, on the ground that peculiarities of mind, like constitutional peculiarities, are hereditary (which fact is probably best explained by the connection between the mind and the brain, as recognised by the phrenological doctrine), then the necessity becomes still more urgent for the enlargement of the mind of woman, that a more favourable condition for the improvement of the mind may be transmitted to her children.

The old metaphysical idea that the mind is free, unbounded, unfettered, illimitable, and all the rest of it, may appear very well in romance, which is its only legitimate province, but in the philosophy of the mind it should have no place. It may please the ear, but it has only fine words, and not truth, for its foundation. The mind may be unbounded by being able in its imaginings to rove unrestrainedly to any point in space, to soar above to the highest heavens, or to dive down into the lowest pit of hell; but sometimes the mind, in its wanderings, goes too far to get back again, and where, then, is its boundless freedom? Until we rid ourselves of this sublime delusion about the mind's freedom, and learn to know that, subtle as it is, the mind is subject to certain laws, there can be no such thing as a *judicious* management of the mind, and both folly and madness will, as hitherto, remain insolvable mysteries. But when we learn that the mind, like the body, is strengthened and improved by exercise, that its perfect development depends upon a variety of exercises, that it becomes distorted if its parts are unequally exercised, that it dwindles and degenerates from inactivity, is liable to disease, is

disabled if over-wrought, or that it is either excited or depressed by intemperance—when we learn that disease of mind is thus effected, and, like disease of the body, is transmitted from parents to children, and that we cannot long continue to indulge the passions or propensities to the neglect of our moral and intellectual nature without enfeebling and deranging the mind, and without the risk of having to rear a family of idiots, we may then discover the true source of folly and madness, and know better how to avoid the ways that lead to them. When we begin to attend to these facts, and dismiss the old high-sounding and fallacious theories about the mind, and become observant of the laws by which the mind is governed, we may hope to secure for our trouble that genial harmony between the faculties upon which depends the happiness of the mind, and without which life itself becomes undesirable and its pleasures joyless.

As, in the business of building a stately mansion, the offices of digging for a foundation, removing rubbish, and carrying materials are regarded as mean and servile, so the like labours of the phrenologist in the science of the mind have been lightly esteemed, and in many instances even reviled. But this has occurred only among those who have misunderstood the principles of Phrenology, or who have apprehended from them a dissolution of certain long-cherished family maxims, which they would not have disturbed neither for philosophy nor even for truth itself. By such objectors it has been said that, as Phrenology teaches that the mind carries on its operations by means of a material instrument, the brain, and that the mind is ill or well disposed as the head is ill or well shaped, it must necessarily lead to the belief that man is unaccountable for his actions, since no man is his own maker. Such a doctrine, therefore, cannot but lead to materialism, atheism, and ultimately to the devil.

As the reasoning here appears to be feasible, it will be necessary either to show that the principles upon which it is founded are false, or to admit the conclusion. If a clergyman was told that there exists a correspondence between the body and the soul, which is proved by the facts that the body of the proud-souled man is erect; that the body of the humble-souled man has a modest inclination; that the shoulders of the miser are drawn up as if from the habit of making a thin coat keep him warm in winter; also that the movements of the sluggard's body are as his character, idle and lazy; that therefore a man should not be held as a responsible being, seeing that he conducts himself but in accordance with the form of his body which he did not himself make;—the answer in all probability would be that a man's body

assumes these bends and turns from being engaged in those ways that gave rise to them, just as the muscles of the body take their conformation from the exercises they undergo ; and, consequently, as it is the body that is influenced by the mind, and not the mind by the body, a man's self-accountableness is not therefore interfered with. It is by such an answer as this that the phrenologist rebuts the charge made against his science—that it leads to fatalism. In this he is fully justified by the circumstance that it is one of the propositions of Phrenology that the cerebral organs become developed in proportion as the faculties with which they are connected are exercised. In this respect the laws of cerebral organisation form no exception to, and differ in nowise from, the laws of animal organisation.

Accordingly, it will be seen that the above charge is founded upon the misunderstanding and error that the brain *determines* the mind. It is the mind that determines the brain. Instead, then, of engendering fatalism, the science of Phrenology leads rather to the conclusion that it is *opposed* to it, namely, that “God no more expressly decreed a mean form of organisation than he expressly decreed the excesses which led to it.”

“ Each man makes his own stature, builds himself
 * * * * low or high,
 As vice or virtue sinks him, or sublimes.”—*Dr. Young.*

Phrenology has had among its advocates many who have *misinterpreted* its principles (probably unknowingly) with the view of propagating their *own irreligious tenets*. Among such have been some very able writers, by whose intermeddling Phrenology has been rendered but as a black spot among the sciences. But as of late the principles of Phrenology have become better understood, and are thereby seen to point in just the opposite direction to that of atheism ; so the science is beginning to lose caste among such that were its admirers, but who now inveigh against it with acrimony and rancour, and who believe that they would be held up to reproach if they but admitted it among their studies. Unless the object of this work has hitherto been widely missed, it may have been seen that Phrenology frequently furnishes evidence by which is established, beyond the possibility of doubt, many truths, both in philosophy and religion, about which no general agreement has been arrived at among philosophers ancient or modern, for want of such evidence. Men will sometimes succumb their faith to God's work, when they will not heed his Word.

In proportion as Phrenology was extolled for being opposed

to orthodox views, so it was depreciated to those with whose principles of integrity it was supposed to contend, and as a matter of course it was discountenanced by the "schoolmen." It is in consequence of this that the subject of Phrenology forms no part of education, and that people are brought up in entire ignorance of their mental nature. Instead, then, of being adopted, as it should, by the schoolmen, as forming the basis of a perfect system of philosophy, Phrenology has been allowed, through misinterpretation, to become but a subject of ridicule and contempt.

To this the works of several humorists still bear testimony. Captain Marryatt, in his "Midshipman Easy," by the inversion of one of the phrenological principles, represents that if the head be placed in a machine by which the organs of the propensities are to be screwed down, and those of the sentiments drawn out, it is possible to convert a malefactor into a divine. The humour of the idea consists in its extravagance, which is equal to that of supposing that a piece of brass may be turned into gold by giving it the "guinea stamp;" or that vinegar becomes wine by pouring it into wine-bottles. By a similar *misconstruction* of the principles of Phrenology, Mr. Henry Cockton has made up a very humorous chapter, in his work entitled "Valentine Vox," in which he says, "What a beautiful science is that of Phrenology! In the whole range of sciences where is there one which is either so useful or so ornamental? Fortune-telling is a fool to it. It stands with consummate boldness upon the very pinnacle of fatality. To the predestinarian it is a source of great comfort; to all who desire to take themselves entirely out of their own hands—to get rid of that sort of responsibility which is sometimes extremely inconvenient—it is really a positive blessing. When this delightful science shall have made its way home to the hearts of mankind universally, as it must, what a lovely scheme of life will be opened before us!—what a charming state of society will be based upon the ruins of our present dreadful system of civilisation! Then, and not till then, will mankind be quite happy. Then will perfect liberty obtain. Then will men see the sand-blindness of their ancestors, and sweep away like chaff the dreadful injustice which forms the very essence of punishment. Then will it be seen that law and liberty are inimical—a thing which has but to be seen for our statute-books to be converted into one monstrous cinder, and placed upon a pedestal as an everlasting relic of excruciating tyranny. It will then be acknowledged that men are but men—that they are by no means accountable for their actions—that they do thus or thus simply because they have been predestined to do thus or thus—and that, therefore, they cannot be censured or

punished with justice. It will then seem amazing that punishments should have been countenanced—amazing that men should have been made by their fellow-men to suffer for actions over which they clearly had no control—nay, actions which they were, in fact, bound to perform!—for why, it will be argued, do men commit murders? why do they perpetrate rapes and pick pockets? Why—clearly because they can't help it! And what line of argument can be shorter? And as for its soundness—why that will of course be perceived at a glance.

“It is lamentable—absolutely lamentable—to think that this extremely blessed state of society stands no sort of chance of being established before the next generation; and we, who endure the atrocities of the present cramped-up scheme, may with infinite reason envy the sweet feelings, the delightful sensations, the charming state of mind, which the establishment of a phrenologically social system must of necessity induce. There are, of course, some unhappy individuals in existence sufficiently ill-conditioned to contend that Phrenology *never* can bring about this unspeakably glorious state of things: and really none can wonder at it!—none can wonder that the cool contemplation of such a delightful state of society should confirm the incredulity of the naturally incredulous—but that it will, when carried out to its legitimate length, be productive of all those extraordinary blessings, reflection—disinterested reflection—will render abundantly clear. It is all very well and very natural for lawyers, physicians, and such kinds of people to uphold the present system, inasmuch as it is by that system they thrive. They perfectly well know that if a system were established upon these two bold and eternal principles—first, that ‘Whatever is, is right,’ and, secondly, that ‘They who are born to be hanged can never be drowned,’ their respective occupations would be gone; seeing that Nature would then be allowed to take the entire thing into her own ample hands.”

To give extravagance to this joke the author adds:—“But there are also phrenologists sufficiently weak to maintain that their own immortal science is by no means designed to accomplish the great objects to which reference has been had. These, however, are not pure phrenologists. They take an extremely rotten view of the thing, and are much to be pitied. The professors of a science ought never to underrate the advantages of the science of which they are the professors. It isn't right; such a course has a direct and natural tendency to bring the thing eventually into contempt. If Nature has implanted in our skulls certain organs containing the germs of certain passions, whose internal working not only produce an external development, but force us to act

as they direct, or in obedience to their will, we have clearly no right to the reputation of being responsible creatures; and we have but to believe that we possess no such right, to recognise the injustice involved in all punishments, and thus to lay the foundation of that sweet social system which cannot be thought of without pure delight."

Although this was written merely to be laughed at, it is read by many who, from not knowing better, believe it to be a sincere representation of Phrenology. Hence the vulgar notion that such nonsense constitutes the very quintessence of Phrenology. Thus the jest becomes a matter of serious consideration; and, if allowed to pass unnoticed, may lead to very unfavourable consequences; for nothing can be either more dangerous or demoralising than the belief that the human mind is under subjection of a predestined fate.

As to "Whatever is, is right," Alexander Pope said this in reference to God's laws, by which he meant that we should not murmur against them for being occasionally unfavourable to our wishes, but be content that they are not more rigorous. How such an axiom can be supposed to justify crime seems strange in the extreme, seeing that the same rule, "Whatever *is*, is right," must also justify the punishment of criminals, since it *is* the law to do so, and therefore must be right.

In reference to the second "bold and eternal principle," namely, "They who are born to be hanged can never be drowned," such has only to be heard to be laughed at. But if, according to this principle, some "are born to be hanged," where is the use in seeking to overturn the laws which are so necessary to enable those persons to comply with that end who are "born to be hanged?"

That part about "germs of passions in our skulls which *force* us to act in obedience to their will," is equal to the idea that cabbage-seeds, because of their germinating property, will of themselves grow into cabbages, without the care and tendance of the gardener to sow them in a proper place and at a seasonable time. The absurdity of the notion is almost as great as that expressed in the following dialogue:—

"Indeed, indeed, friend Tom," said one citizen to another, "you have spoiled the look of your nag by cropping his ears so close. What could be your reason for doing it?"

"Why, friend Turtle, I will tell you. My horse had a strange knack of being frightened, and on very trifling occasions would prick up his ears, and start off as if he had seen the devil; so to stop his gallop I cropt him."

Many erroneous notions concerning Phrenology are, no doubt,

traceable to the loose manner employed by various phrenologists in propounding the science. To these Dr. Spurzheim is not an exception, for he says, in his "Philosophical Principles of Phrenology," "The second right of Nature is to allow more or less activity to individual faculties in different persons, that is, she endows all with the same faculties, but gives them in very different degrees. Some few are geniuses, but the majority are middling in all respects. Nature, then, produces the genius and individual dispositions of every one."

From the manner in which the principles of Phrenology have been portrayed in the former part of this work, it seems difficult to understand in what way they justify such a view. It, indeed, appears more reasonable to believe that Phrenology is actually opposed to this view; for if geniuses are such only from having been better endowed than others, there is no more credit due to them for their superiority than to those who are only middling in accordance with their middling endowments. Praise and blame, and rewards and punishments, should therefore be abolished. But such a state would be opposed to the existence of the sentiment of Love of Approbation, which Phrenology recognises as one of the fundamental powers of the mind.

It is a rule with Nature not to give a faculty, without a sphere in which to *exercise* that faculty. There exists the sense of seeing—colours, light, and objects also exist to gratify it. There exists a sense of taste—flavours also exist to indulge this sense. A sense of hearing—sounds exist. Smell—and odour exists. But shall the sense of *praise* and *blame* be an exception to this rule, and have no sphere for its exercise? The economy of Nature renders this inadmissible.

If it was admitted that the wise are wise and that the foolish are foolish from the dispensations of Nature, it might be thought not unreasonable to infer that the virtuous are virtuous and that the vicious are vicious from the same causes. And it might also be thought equally reasonable to conclude that if it is but in accordance with his Maker's will that a man is good or bad, then there should be no such states as right and wrong, and that rewards and punishments are unjust. It happens, however, that such a theory is completely overthrown by the very sense that leads to the inference that rewards and punishments should be discountenanced; for there could not exist even this *sense* of right and wrong, if right and wrong were nonentities. Such a doctrine, then, is not only *inconsistent with reason*, but is repugnant to our moral feelings, and also with Phrenology, which acknowledges their existence.

But it is not to Phrenology that we are indebted for the origin of such philosophy, for the same was sung in almost every ale-house before Phrenology was discovered :—

“ A fig for those by law protected !
 Liberty is a glorious feast !
 Courts for cowards were erected,
 Churches built to please the priest.”
“ The Jolly Beggars ” (Burns).

Such philosophy as this is seen at once to be opposed to both State and Divine laws. Nor was this unobserved by Dr. Spurzheim, who, to palliate this, says:—“ To conceive revelation in opposition to natural laws, is either to prove it false, or to advance that the Creator of all things is not the God who revealed the law.” To support this, his favourite doctrine, Dr. Spurzheim says :—“ Some faculties are more active in women, others in men. Men will never feel like women, and women will never think like men.” It is true that the female head generally measures one inch less in horizontal circumference than the male head, and that the deficiency is not generally among the organs of the propensities or the sentiments, but among those of the intellectual faculties. Accordingly, women are more sociable and sympathetic than men, for which reason they are considered the weaker sex ; and they are less capable of deep or profound thought than men, their studies being generally petty and frivolous. But that this difference in the mental powers between the sexes is stamped upon them by *nature* may well be doubted. The physiological nature of woman somewhat confines her to home, which sphere is less favourable to the development of the intellectual powers than the commercial occupations generally pursued by man ; and while her babe, which demands her first care, awakens and engages the feelings, she cannot possibly have the same opportunities to exercise the intellectual powers as man, whose pursuits are not thus circumscribed.

It is difficult to consider these circumstances without seeing that they explain this difference between the characters of men and women which Dr. Spurzheim charges wholly to Nature. But what more fully confirms that this difference is not stamped and fixed by Nature is the fact that women who, having quitted what is considered their natural sphere by engaging in the sciences and arts, have won for themselves reputations not inferior to those acquired by many men of the highest order.

As an animal painter, the works of Rosa Bonheur are regarded by judges as not inferior to those of either Landseer or Harrison

Weir. The sculptures by Mrs. Thornycroft, for elegance and delicacy of finish, deserve, with the best, the places they fill in courts and palaces. John Kemble, great as he was in his profession, was not superior to Mrs. Siddons. That many of the best literary and artistic productions of men owe their perfection to the suggestions and criticisms of women may be denied, but not disproved. It would be ridiculous with such names before us as Mrs. Hemans, Hannah More, Mrs. Child, Madame De Stael, Mary Wolstoncroft, Mrs. Marcet, Mrs. Somerville, Miss Martineau, Mrs. Lee, Eliza Cook, Mrs. Stowe, &c., to believe that women in point of intellect are inferior to men. The casts taken from the heads of some of these ladies are as complete, both in measure and type, as the generality of male heads. Although the average measure of the female head is less than that of the male head, it is partly compensated for by the superior temperament of females.

Neither can it be said that females want the courage and intrepidity necessary for the execution of extensive undertakings, while it can be remembered that even the dauntlessness of a brave British sailor was exceeded by that of a girl—Grace Darling—and that when great and sturdy warriors have quailed, an army has been led to victory by a maiden—Joan of Arc.

Probably Dr. Spurzheim would regard these but as particular instances, from which it is dangerous to form a general view. But, apart from these instances, we cannot entertain the belief that it is impossible for women to attain the same degree of perfection in the intellectual faculties as men, because they have not already done so without falling into the error so forcibly denounced by the Rev. Sydney Smith, who says: "Nothing is more common or more stupid than to take the actual for the possible; to believe that all which is, is all which can be; first to laugh at every proposed deviation from practice as impossible, then, when it is carried into effect, to be astonished that it did not take place before."

When women relinquish the habit they have of confining themselves so much indoors, which conduces to the nervous and other ailments that ultimately incapacitate them for active and outdoor exercises, they will secure for themselves a condition more favourable to the cultivation of their intellectual powers; which, it is hoped, will greatly increase the list of female celebrities, and so refute the proposition on which Dr. Spurzheim founds the hypothesis that Nature produces people as we find them. Referring to the differences in the mental powers of men and women, Dr. Spurzheim says, "These are facts which observation proves." Although this may be true, we are not therefore

justified in the belief that these differences are entirely the work of Nature. Indeed, if observation was alone sufficient to prove what we see to be the work of Nature, we should have to believe that some persons are created with wooden legs and broken backs, but which, like mental imperfections, result from the non-observance of some law.

“That man might feel his error, if unseen,
And feeling, fly to labour for his cure.”

As Dr. Spurzheim remarks, it *is* certainly common for children in the same family to differ in disposition ; but this difference may be accounted for by the caressing of one and the chiding of another, which is also common in families. Any bodily ailment from which one only of a family may suffer would also tend to produce this difference of disposition ; for Dr. Spurzheim says, “Who can deny the effect of disease upon the manifestation of our faculties?” In cases of twins, where the conditions are more likely to be equal, it will be found that the dispositions are proportionately similar. Dr. Spurzheim tells of a case of twin boys, who, he says, were “so like each other that it was almost impossible to distinguish them ; their inclinations and talents were also strikingly similar.” But, keeping in view the doctrine which has been referred to, he tells of another instance of twin sisters, who, he says, “are very different, the muscular system in the one being most developed, the nervous in the other ; and while the first has little understanding, the second is eminently talented.” From the physiological difference between them, it is very evident that both these children, in this case, were not engaged in like employments, which fact should account for the difference in their mental capacities. In short, to ascribe entirely to Nature the differences of disposition which are found among the same species, is to ignore the fact that *different occupations* employ and develop *different faculties*.”

It is said that “pups of the same litter have been known to differ ; one is sour and crabbed, the rest humorous and playful.” But this being the case does not prove that the one dog is born with *different* endowments to the others. It is possible that a gnat may fly into the eye of one, and not of the rest, and the agony caused thereby would bring about this snappish disposition, which the others may not have had cause to show ; for, as Dr. Spurzheim says, “particular degrees of excitement suppress the activity of certain faculties, while they increase that of others.” Why, then, may this difference of temper not be caused by the intrusions of a flea, by which one of the litter may be tormented ?

Such occurrences have been known to aggravate a human being, and why not a pup?

To confirm that some are born with endowments *superior* to others, Dr. Spurzheim says: "I have the history of a pointer, which, when kept out of a place near the fire by the other dogs of the family, used to go into the yard and bark. All immediately went and did the same; meanwhile he ran in, and secured the best place. Though his companions were often deceived, none of them ever imitated his stratagem. I also knew a little dog which, when eating with large ones, behaved in the same manner, in order to secure his portion, or to catch some good bits." This extra cunning may have resulted from some cross or distant relationship with the fox. Buffon, however, would be the better authority on this subject, and he says: "The same shepherds' dogs, transported into temperate climates, such as those of England, France, or Germany, lose their savage air, their straight ears, their long, thick, and rough hair, and become *mastiff, hound, or bulldog, by the influence of climate merely*." Since, then, these distinguished differences in dogs are determined by the temperature or climate, what warrantable evidence have we that this difference in the dogs referred to by Dr. Spurzheim is not caused by some *outward influence*, and not an extra endowment?

It would be much more reasonable to argue that the mental powers are given in different degrees to different persons, from the fact that some are born idiots, and evidently very different to others not born so. It is now well known, however, that idiocy arises from drunkenness in parents; and it is believed by many that intermarrying with near relations is also a cause of idiocy.

"Marrying their cousins, nay, their aunts and nieces,
Which always spoils the breed if it increases."—*Byron*.

We cannot, therefore, charge to Nature what is evidently an effect of our working. Idiocy, then, is *not an endowment*, but a *penalty* incurred through infringing some law. It is probable that it is to some unknown breach of the same law that weak minds or mental defects owe their chief origin. In Mr. Fowler's work entitled "Amativeness," it is said in reference to a habit practised by children, unknown to their parents, that "it enfeebles the mind," and that "no cause is more influential in producing insanity." Perhaps when these matters are better understood, we may see reason for tracing our follies and our weaknesses, not to our Maker, but to ourselves; and learn to know that God made man, as Milton says—

“Just and right ;
Sufficient to have stood, though free to fall.”

It would be neither new nor strange to know that the organised system is strengthened and perfected by the proper exercise of its functions ; for it is universally admitted that the muscles of the body are developed by exercise, while they become lax and feeble from inactivity. Locke says, “This is certain, he that sets out upon weak legs, will not only go farther, but grow stronger too, than one who, with a vigorous constitution and firm limbs, only sits still.” Nor does the order of the organs of the mental faculties form an exception to this rule ; which is a fact acknowledged by Mr. Combe, who says, “The brain partakes of the general qualities of the organised system, and is strengthened by the same means as the other organs.” He also says, “Thought and feeling are to the brain what bodily exercise is to the muscles.” Now that we have it from so great an authority, it would seem very strange after this for any one to suppose it was a man’s badly-shaped head that *made him act badly*. It at least would *seem* that it was *not* altogether with the brain as with the muscles, for it was never known that a vigorous frame was the *cause* of labour and activity, though we have heard that active exercise will cause weak constitutions to become vigorous and powerful. If, then, any one should say, “If the real *cause* of human offences be excessive size and activity of the organs of the animal propensities ;” or, if we heard any one say, “If offences proceed from unfortunate development of brain,” we should very naturally conclude that such a person was ignorant of the organic laws, and not aware that “the brain partakes of the general qualities of the organised system.” But what shall we think when we hear that Mr. Combe, who aspired to so great a knowledge of the organic laws, was the author of those very sentences ? And, what is most strange, he used them not to expose their inconsistency with the organic laws, but soberly and seriously to show that “mere punishment cannot put a stop to crime.”

However, without now expatiating on what he intended to show, it appears that he was “wedded” to tenets which he endeavoured to maintain, although they were opposed by the dictates of Nature. This he himself partly owns by saying : “Every preceptor in schools—every professor in colleges—every



61.—IRISH IDIOT.

author, editor, and pamphleteer—every Member of Parliament, counsellor, and judge, has a set of notions of his own, which in his mind holds the place of a system of the philosophy of man; and, although he may not have methodised his ideas, or even acknowledge them to himself as a theory, yet they constitute a standard to him by which he practically judges of all questions in morals, politics, and religion; he advocates whatever views coincide with them, and condemns all that differ from them, with as unhesitating a dogmatism as the most pertinacious theorist on earth.”

Pope’s “Homer” says:—

“Perverse mankind! whose will’s created free,
Charge all their woes on absolute Decree;
All to the dooming gods their guilt translate,
And follies are miscalled the crimes of Fate.”

Since such notions were in vogue even long before the Christian era, it would be unjust to accuse Phrenology of having *given rise* to them; and as they, in more modern times, appear to be the opinions of most great men—not excepting Shakespeare, for he says, “There is nothing either good or bad but thinking makes it so”—it seems but obstinacy on our part not to join them. And yet we could do no more than allow ourselves to be led thus if the powers of reasoning and observing had been entrusted to these men only. But when we see, as taught by Phrenology, that the reasoning faculties have been dispersed among us all, it behoves us, as a duty, to apply them, and thereby judge for ourselves, especially in matters that are doubtful: for, if we should go wrong by the teaching of others, we must not expect to be excused when it remains to be said that *we* have had the faculties to judge for ourselves, and therefore it is *our own* fault if we have not used them; and which would, as Dr. Watts says, “be a dishonour to the God that made us reasonable beings.”

“Knowing is seeing,” says Locke, “and if it be so, it is madness to persuade ourselves that we do so with another man’s eyes, let him use never so many words to tell us that what *he* asserts is very visible. Until we see it with *our own eyes*, and *perceive it by our own understandings*, we are as much in the dark and as void of knowledge as before, let us believe any learned author as much as we will.” In such case, then, the necessity of using our own faculties is evidently great; particularly if we consider the inconsistencies among many professed authorities, who not only contradict each other but themselves.

It is also the philosophy of Locke that “when a truth is

made out by one demonstration, there needs no further inquiry ; but in all probabilities, when there wants demonstration to establish the truth beyond a doubt, it is not enough to trace one argument to its source, and observe its strength and weakness, but all the arguments, after having been examined on both sides, must be laid in balance one against another, and upon the whole the understanding determines its assent."

Under the guidance of such prudent advice, perhaps it will be as well not to conclude that this dissension in Mr. Combe's writings is a proof that his views are wrong ; and it may be excusable, therefore, to pursue the subject a little further, and observe the arguments by which he supports them.

"Form, size, and quality of the brain, like those of other parts of the body," he says, "are transmissible from parents to children ; and hence dispositions and talents are transmissible also, as has been long remarked, not only by medical authorities, but by attentive observers in general." Such a law with regard to the mind, it will be remembered, has already been acknowledged in a former section of this work. After such an acknowledgment, the writer would be but assuming the character of a despicable quibbler by attempting to dispute the *existence* of such a law. These remarks, however, are but futile, as it is not intended to raise any such dispute ; although enough has been said by various authorities on the subject of the mind to make it doubtful that dispositions and talents are hereditary. Mrs. Child says, and no doubt very truly, "It is important that children, even when babes, should never be witnesses of anger or any evil passions ;" also that "every step of infantine progress should be encouraged by expressions of pleasure." She also says, "Every look, every movement, every expression, does something towards forming the character of the little heir to immortal life." As, then, the character is formed thus early, it seems no easy matter to ascertain whether it is transmitted from the parent to the child, or whether it is *acquired*, during infancy, from example. That the disposition of children should resemble that of their parents may be accounted for by the former being trained under the latter. Such resemblance cannot be regarded as proof that the disposition of the child is transmitted from the parent. As the brain takes its conformation according to the exercise of its functions, a similarity of organisation between parents and children cannot be taken as proof that particular organisations, any more than particular dispositions, are transmissible.

In a case where a man was summoned to pay for the support of his son, then in a reformatory, Mr. Woolrych said, "I have

noticed, in the course of my experience as a magistrate, that parents are responsible for the crimes of their children. It is owing generally to parental neglect that children are guilty of offences against the laws of their country." Mr. Brannan, the manager of the reformatory, then said, "In the hundreds of thousands of cases that have come under my notice, juvenile offenders have been made so by the evil example and neglect of their parents." He adds, "I never knew an instance to the contrary."

These observations, then, appear somewhat at variance with those of Mr. Combe ; while the fact that well-disposed parents frequently beget ill-disposed children, and *vice versâ*, seems altogether opposed to the view that particular dispositions are *transmissible*.

But, notwithstanding this, the brain being corporeal, there can be no doubt of its being subject to the same laws as those which govern the other parts of the corporeal system ; which fact cannot be regarded otherwise than as favourable to the conclusion that peculiarities of character descend, as Mr. Combe says, "from father to son, just as gout, rheumatism, scrofula, and other diseases are known to descend from generation to generation."

In this, then, we must acquiesce with Mr. Combe, since the fact has its foundation in nature ; particularly if we would regard as truth that part of the Bible which says, "The iniquities of the fathers shall be visited upon the children unto the third and fourth generation." But if the recognition of this law has led Mr. Combe to infer that offenders of the law or laws should be treated by the State as "moral patients," instead of being punished according to their trespasses ; with what degree of reason does he state that the brain partakes of the general qualities of the body, when, as he must have known full well, the laws governing the body make no such allowances ? Are any known to be less sensible to the pains attending the diseases brought about by the inadvertence of their parents, than those who, by their own recklessness, bring such diseases upon themselves ?

The fact is too well known to require instances to prove that if we indulge the passions to a criminal degree, we shall incur the consequent disgrace and misery, not only to ourselves, but those also that are nearest and dearest to us.

As, then, it is Nature's own law, there is no doubt but that it is the best way to check what is wrong and evil ; for it cannot be denied that many have been deterred from a downward course by family ties and by the fear of dragging into the mire the innocent with themselves, while many, for want of such ties, have chosen

the path to ruin. How often have the heedless said they would rather endure ten times the amount of bodily suffering incurred by their guilt, if it would but free them from the bitter reflection of having, by their own follies, brought pain and suffering upon the innocents that loved them?

Since this arrangement of Nature's laws proves so effectual in checking crime and leading man aright, it might reasonably be apprehended to be good policy to regulate the laws of the State from them, and punish all offenders, whether they are such from hereditary influence or otherwise. In many instances it is less from fear of the gallows than the disgrace that would fall upon their children that many are deterred from gratifying the deadly feeling of revenge. Garotting, which was so prevalent in the metropolis, has, since the employment of the lash, nearly subsided, while capital punishment is dreaded most of all by callous malefactors, who often remark, when apprehended, that they don't care so long as they will not get hanged. This, no doubt, many policemen can corroborate. To insinuate then, as Mr. Combe does, that mere punishment cannot suppress crime, is but to say what is contradicted by experience, from which we well know that the gallows and the hangman's whip are both necessary to "hold the wretch in order." Indeed, when a man is found guilty of offences against the laws of his country, and tries to justify his transgressions upon the plea that he "couldn't help it," he then gives the very best reason why he should, as the law prescribes, be shut up in a prison-house, not only because he should no longer be an annoyance to others, but more particularly to prevent him transmitting his evil nature to others.

As an objection to Phrenology, it is often urged that cases have been known in which a part of the brain has been injured and removed, while the faculties connected with that part have continued their operations apparently uninterrupted. The usual answer to this is that the organs of the mental faculties are *double*, and that it is possible for one or several organs to be destroyed, while their functions may be performed by the corresponding organs on the opposite side of the head; just as the faculty of seeing may be continued by one eye after the other has been destroyed.

Dr. Samuel Solly, Lecturer on Anatomy and Physiology in St. Thomas's Hospital, says, in the first edition of his work on "The Brain:" "When the brain has been injured, and the faculties of the individual have not appeared to suffer, it is likely that the ideas of the individual have never been sufficiently abundant to attract notice to the loss of them as depended on that part of the

instrument of intellect which has been injured. The circumstance has also been accounted for by the phrenologists upon the principle that the mental organs are double, and that the loss of one is not therefore easily perceived ; and this opinion is certainly supported by the fact that there are no cases on record in which the mental faculties have remained undisturbed when the disorganisation has extended to both sides of the brain."

This explanation, though it may silence one class of objectors to Phrenology, cannot fail to excite another, since it appears to imply that the mind is affected and annihilated in proportion as the brain is affected or injured.

For this reason it is said that Phrenology favours the question of materialism. This, however, affords no objection to the fact, since no "ism" it may favour can alter it if true ; nor should we allow this to disconcert us while *truth* be our standard.

To reject and denounce the discoveries made and confirmed by the observation of nature because they appear at variance with our *prepossessed* principles, is mean in proportion as it is unbecoming a reasoning being ; for it *may* be that our principles are at fault, and to reject, without consideration, as being false, whatever appears in opposition to them, for fear of exposure, is, according to Locke's philosophy, much about the same as to acknowledge the futility of such principles.

"Nor should a student in divinity," says Dr. Watts, "imagine that our age has arrived at a full understanding of everything which can be known by the Scriptures." And to this it may be added that God is surely not so ironical as to *give us faculties to comprehend what we are not to believe*. Our great philosopher, John Locke, tells us that "God requires not men to wrong or misuse their faculties for him, nor to lie to others or themselves for his sake ; which they purposely do who will not suffer their understandings to have right conceptions of the things proposed to them, and designedly restrain themselves from having just thoughts of everything, as far as they are concerned to inquire. *And as for a good cause, that needs no such ill helps ; if it be good, truth will support it, and it has no need of fallacy or falsehood.*" Dr. Watts says further, "It is certain there are several things in the Bible yet unknown, and not sufficiently explained." Therefore, we should relinquish the principles founded upon the false explanations of the writings of God, when we see them openly contradicted by Nature (his own handiwork), and console ourselves with the happy discovery of such misinterpretations ; for, as Dr. Watts also says, "we are accountable to God our Judge for every

part of our irregular and mistaken conduct, *where he has given us sufficient advantage to guard against those mistakes.*"

But to return to the point. Supposing the mind does appear to continue its operations, even when both hemispheres of the brain are diseased, that would surely not affect the phrenological doctrine that the brain is the organ of the mind. The brain, by age or injury, may be unfitted for collecting and arranging ideas, yet those ideas, collected during its healthy state, are still retained; and it is by recurring to these that persons appear to enjoy an uninterrupted possession of their faculties. This is seen in cases of ossification of the brain in old age, where the individual, though insensible to existing circumstances, is continually ruminating over the incidents and circumstances which engaged the mind while its instrument was in a condition favourable to receiving impressions from the physical world. Such manifestations, it is presumed, cannot be made when the organ of language is also affected, for speech being dependent on the movements of the tongue, which movements are dependent on a variety of nerves, guided by an organ in obedience to the will of the individual, it is necessary that such organ be *sound*, otherwise silence or an incoherent jargon will ensue. But while from this cause the power of *manifesting* the mind ceases, it affords no proof of a cessation of the mind itself. What we learn, then, from these facts is, that the mind, in this state of existence, requires a material instrument through which to hold communication with the material world, while its own presence is cognizable only *through* the same instrument.

To say, then, that the mind ceases with the dissolution of the brain, is to betray an intellect as feeble as that of a child that thinks a distant object ceases to exist because it is invisible after the removal of the telescope through which alone it can be seen.

"The time hath been
That when the brains were out, the man would die,
And there an end; but now they rise again."—*Shakespeare.*

It is frequently, but falsely, said that the study of Phrenology generates a disbelief in the immortality of the soul. There are certainly those who, to establish their principles of materialism, will say that they are justified in asserting that the mind or soul will decay and end with the brain, because Phrenology proposes that the mind is strong or weak in proportion to the development of the brain. But this is carrying the proposition to an improper length. The true phrenologist professes to know of the mental powers only in connection with the brain, and nothing of

what the mind is or is not, apart from the brain. Nor can the phrenologist pride his science for having engendered any such dogma, for an anti-phrenologist says (or to the same effect) that the writings of the most cautious physiologists have already settled this point, without any aid from Phrenology. To prove this he quotes Professor Lawrence, who, he tells us, in reference to the mind, inquires, "Do we not trace it advancing by a slow process through infancy and childhood to the perfect expansion of its faculties in the adult; annihilated for a time by a blow on the head, or the shedding of a little blood in apoplexy; decaying as the body declines in old age; and finally reduced to an amount hardly perceptible, when the body, worn out by the mere exercise of the organs, reaches, by the simple operation of natural decay, that state of decrepitude aptly termed second childhood?"

Since it is thus shown to be no concern of Phrenology, it is certainly not a subject for the phrenologist to meddle with. But as many may labour under the mistake that the conclusions of Professor Lawrence are just, it falls rather to the duty of the theologian to point out the error, since it is a question that concerns the immortality of the soul. This may be done by referring to some of the innumerable cases in which those aged and apparently childish persons have, at their death-time, related incidents of their past lives which had been forgotten even by saner members of the family. Others have given utterance to conceptions of which they were supposed to be incapable; showing, as the mind frees itself from its contracted gaol, and is no longer the prisoner of the body, that it then becomes collected and whole again; thus leaving us at liberty to bid adieu to materialism, and to hope still that we may meet where it is promised we shall "never part again."

"Life makes the soul dependent on the dust;
Death gives her wings to mount above the spheres.
'Thro' chinks styled organs, dim life peeps at light;
Death bursts the involving cloud, and all is day.

* * * * *

Death but entombs the body, life the soul."—*Dr. Young.*

"Hope humbly then; with trembling pinions soar;
Wait the great teacher, Death; and God adore."—*Pope.*

"This hour of death has given me more
Of reason's power than years before."—*Scott.*

Where this revivifying of the mind is not made known by speech, it may be traced in the expressions of the face, or by the movements of the body.

“ Oh ! there are looks and tones that dart
 An instant sunshine through the heart—
 As if the soul that minute caught
 Some treasure it through life had sought.”—*Moore.*

When these symptoms are not shown at all, we can only suppose that the body had become too weak to manifest them ; unless such persons had given up their lives to “ the bread-and-butter study,” in which case we should not expect them to show signs of carrying off what they had never provided themselves with ; indeed, it would be as inconsistent as to expect a dying rat to ruminate over matters that it has not the faculties to comprehend. Not that a man is made without the faculties to moralise, and enlighten his condition ; but if he makes no more use of them than as if he had them not, he may little expect to enjoy a better state hereafter than is allotted for the ourang-outang, or any animal *void* of faculties to enlighten its existence. It is related by Bishop Hall that there was a nobleman of his day who kept a fool, to whom he one day gave a staff (then commonly used by pedestrians, whether rich or poor), with a charge to keep it till he should meet with a greater *fool* than himself. Not many years after, the nobleman fell sick, even unto death. The fool came to see his sick lord, who said to him, “ I must shortly leave you.” “ And whither are you going ?” asked the fool. “ Into another world,” replied his lordship. “ And when will you be back again—within a month ?” “ No.” “ Within a year ?” “ No.” “ When then ?” “ Never.” “ Never !” echoed the fool ; “ and what provision hast thou made for thy entertainment there whither though goest ?” “ None at all.” “ No !” exclaimed the fool ; “ none at all ? Here, then, take my staff ; for, with all my folly, I am not guilty of any such folly as *this*.”

It has been asked, “ What constitutes the soul ?” As this may be answered most satisfactorily upon phrenological principles ; and as it is partly related to the subject of the preceding section, it may not be out of place to consider this question, particularly since the result cannot possibly prove more ludicrous than the question itself.

In the first place, then, in the search after the soul, we must seek for that which is not possessed by animals, because we are told that they have *no* soul. In that case we must not consider *life* to constitute the soul, because animals possess life ; nor *seeing*, because they can see ; nor *hearing*, because they hear. Nor can it be any of the *external senses* that constitute the soul, because animals have them all ; and, as animals also possess *all the lower passions*, such as the domestic and selfish propensities, the

sensualist may be warned that *licentiousness* forms no part of the soul, and therefore he need not think to take his lusts to heaven—

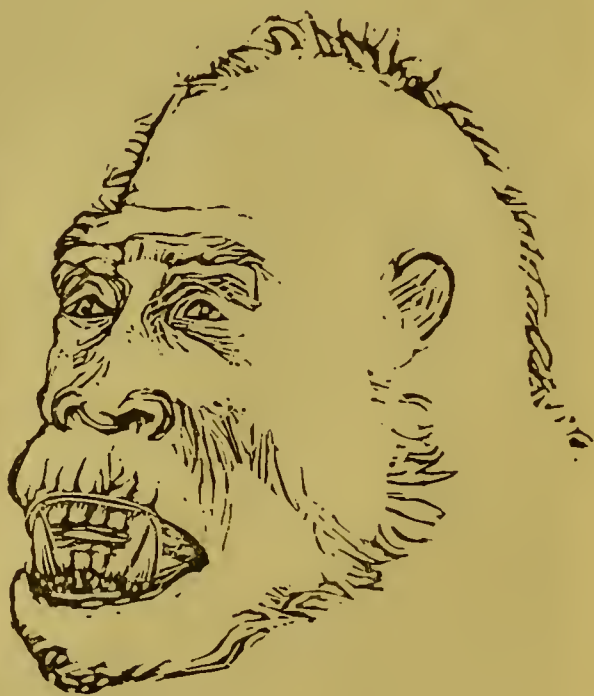
“With pot, pipe, wench, and dog;
To make a pander of his God.”

As it is to be found among animals, we may for that reason know that *pride* is not an element of the soul.

The soul, then, must be different from all that is to be found among the animal tribes. This brings us to understand that we



62.—PRINCE ALBERT.



63.—GORILLA.

need not trouble to seek it in our physical or our animal nature, but in that which is *peculiar* to man. The inquiry then comes, What is this that is *peculiar* to man? If we refer to Phrenology, the answer is, *our moral nature*. If any dependence can be placed in the “Brain Book,” we shall there read that the moral sentiments which constitute our moral nature belong to the *human and not to the animal being*, and that the moral sentiments are peculiar to the *human race*.

“The part of the brain which occupies the front of the skull in man is remarkable for the extent of its volume, and gives that peculiar elevation to the forehead and nobleness of aspect which is nowhere to be found among the inferior species.”—*Lardner’s Museum of Science*, No. 92. (See cuts 62, 63.)

“ Were they as vain as gaudy-minded man,
 As flatulent with fumes of self-applause,
 Their arts and conquests *animals* might boast,
 And claim their laurel crowns as well as we ;
But not celestial. There we stand alone ;
As in our form, distinct, pre-eminent ;
 If prone in thought, our stature is our shame ;
And man should blush, his FOREHEAD MEETS THE SKIES.”—*Dr. Young.*

Thus, then, Phrenology points to *our moral nature* as being that which constitutes the soul. It is the sentiment of benevolence, of loving our neighbours “as ourselves.” It is the feeling that co-exists with reverence and respect. It is justice, truth, the spirit of doing unto others as we would have them do unto us. It is that sense of awe with which we are stricken on beholding the grand and terrible works of Nature. It is these that make up the *immortal* part of man.

“ Yes, believe the muse, the wintry blast of death
 Kills not the buds of virtue ; no, they spread,
 Beneath the heavenly beam of brighter suns,
 Through endless ages, into higher powers !”—*Thompson.*

“ The remembrance
 With which the happy spirit contemplates
 Its well-spent pilgrimage on earth
Shall never pass away.”—*Shelley.*

Who knows so well the true value of these truths as a dying man ? The passions, which had formerly been illusions, abandon him at that period, leaving him only the dreadful spectacle of his past life. A monarch, as related by the wise Sadi, was on his death-bed. A courier entered the room, and said, “Sire, we have taken a city from the enemy.” “Go,” answered the prince, “announce this to my heir ; and tell him that the capture of a hundred cities does not console a king in his last moments so much as the recollection of one *good action.*” A Persian emperor, when hunting, perceived a very old man planting a walnut-tree, and, advancing towards him, asked his age. The peasant replied, “I am four years old.” An attendant standing by rebuked him for uttering such an absurdity in the presence of the emperor. “You censure me without a cause,” replied the peasant. “I did not speak without reflection ; for the wise do not reckon that time which has been lost in folly, and in the cares of the world. I therefore consider that to be my real age which has been passed in serving the Deity and in discharging my duty to society.” The celebrated and talented courtier, Sir John Mason, was born in the reign of Henry VII., and was privy counsellor to Henry VIII., Edward VI., Queen Mary, and Queen Elizabeth. On his death-

bed he called his family together, and thus addressed them : "Lo, I have lived to see five princes, and have been privy counsellor to four of them. I have seen the most remarkable things in foreign parts, and have been present in most State transactions for thirty years at home. After so much experience I have learned that seriousness is the greatest wisdom, temperance the best physician, and a good conscience the best estate ; and were I to live again, I would change the court for a cloister, my privy counsellor's bustle for the retirement of a hermit, and my whole life in the palace for an hour's enjoyment of God in my closet. *All things now forsake me, except my God, my duty, and my prayers.*"

Volumes, indeed libraries, could be filled with such instances, all proving that the *higher sentiments* (as Phrenology shows) are the true elements of the soul, and that it is only our animal nature that decays with the dissolution of the body, and brings about that state which the infidel chooses to call "second childhood."

Probably it may be remarked that we must not deny the dog a soul if veneration forms part of it, because a gradation of that sentiment is to be found in the dog's obedience to its keeper's call. On the morals of dogs the speculations have been neither few nor mean, and to know that this apparent obedience is none other than a symptom of attachment, let its keeper bid the dog go back, and not follow, and it will be seen to do so only with much reluctance, and mostly not without threatening to throw a stone after it. Sometimes it will rather crouch down and be kicked than obey, showing that it is not from a *sense of obedience* that the dog follows its keeper, but merely to gratify its *social nature, or its love of approbation*. All that has been mistaken for kindness in dogs is also to be traced to these feelings. Among the "Anecdotes of Dogs" in "Chambers's Miscellany," we are told of a water-spaniel which, unbidden, plunged into the current of a roaring sluice, to save a small cur which had been maliciously thrown in. Also of a Pomeranian dog belonging to a Dutch vessel, that sprang overboard, caught up a drowning child, and swam on shore with it. And of a Newfoundland dog saving a child in a similar way. These are regarded as instances showing the *benevolence* of dogs. It should, however, not be forgotten that they would have done as much for a cork or a stick. It is a common trait among dogs to go into the water and bring out *any* floating object that they may meet with ; but if it happens to be such that pity demands to be brought on shore, the act is *erroneously* considered to be necessitated by a *benevolent motive*, but which is an *exercise* that the dog delights in, without any regard for the *object* whatever.

Another instance is recorded in the above-named work of a

farmer who had missed his way home, and, from exhaustion, was under the necessity of taking his lodging in the snow during a very frosty night. His dog, which accompanied him, scratched away the snow, rolled himself round, and lay upon his master's bosom, for which his shaggy coat proved a most seasonable covering and effectual protection during the dreadful severity of the night—the snow falling fast all the time. The following morning a person who was out with his gun, in the expectation of falling in with some wild-fowl, perceiving an appearance rather uncommon, ventured to approach the spot. Upon coming up, the dog got off the body, and after repeatedly shaking to get disentangled from the accumulated snow, encouraged the sportsman, by actions of the most significant nature, to come near the side of his master. Wiping away the icy incrustation from the face, the countenance was immediately recollected; but the frame appearing lifeless, assistance was procured to convey it to the first house upon the skirts of the village. A pulsation being observed, every possible means was instantly adopted to promote recovery. In the course of a short time the farmer was sufficiently restored to relate his own story as already recited; and, in gratitude for his extraordinary escape, ordered a silver collar to be made for his friendly protector, as a perpetual remembrancer of the transaction. A gentleman of the faculty in the neighbourhood, hearing of the circumstance, and finding it so well authenticated, immediately made an offer of ten guineas for the dog, which the grateful farmer refused, exultingly adding, that so long as he “had a bone to his meat, or a crust to his bread,” he would divide it with the faithful friend who had preserved his life. This he did in a perfect conviction that the warmth of the dog, in covering the most vital part, had continued the circulation, and prevented a total stagnation of the blood by the frigidity of the elements. Every word of this may be perfectly true; but it is sheer folly to suppose that the dog chose its keeper's body to lie upon for any other purpose than because it was the warmest place it could find for itself—evidently a motive purely selfish.

One evening Dr. Johnson was present at a private party at Oxford, when, among other topics, an essay on the future life of brutes was mentioned; and a gentleman present was inclined to support the author's opinion, that the lower animals *have* an “immortal part.” He familiarly remarked to the doctor, “Really, sir, when we see a very sensible dog, we don't know what to think of him.” Upon which Dr. Johnson, turning quickly round, replied, “True, sir; and when we see a very foolish fellow, we don't know what to think of *him*.”

The next impeachment is that Wit was not named among the faculties that constitute the soul, even though it is *peculiar* to mankind; and perhaps for the reason that it would be too ridiculous to mix up mirth with such serious matters. Yet, with all its ridiculousness, the diversions afforded by such a possession may prove *not so very undesirable* on our journey through the long long eternity that awaits us beyond the awful gate of death; and we may hope that it will not be corrupted and made a bitter sarcasm by the *baser feelings*, but that it will be a pure and holy mirth with its sportive train—

“Wit, humour, and happy glee, like the
 Cheerers of this life, that, by the social hearth,
 Or in the festive throng, rejoice to light
 Their coruscations, flashing as they play
 O’er each charmed visage, bursting into peals
 Of laughter loud, that make the heart
 Shake with sweet ecstasy, and far dispel
 The gloom of care, as summer thunders clear
 The murky elements.”

But what is the use of this, it will be asked, if the next state is to be a spiritual one, in which there will be no faces to laugh at? Just this use, that, as

“Man, by Memory’s key, unlocks the golden treasures of thought,
 And in blissful vision lives o’er all the past,”

it will not make a blank, but a pleasant impression, as he reviews the faces of the erring Dromios, the burly Falstaff, the sanctimonious Tartuffe, the cross-gartered Malvolio, Christopher Sly, Dominie Sampson, and the whole train of merry characters that have so often cheated melancholy, and made pleasant what might have been many dull hours.

“No, the roses soon withered that hung o’er the wave,
 But some blossoms were gathered while freshly they shone,
 And a dew was distilled from their flowers, that gave
 All the fragrance of summer, when summer was gone.
 Thus Memory draws from delight, ere it dies,
 An essence that breathes of it many a year;
 Thus bright to my soul, as ’twas then to my eyes,
 Is that bower on the banks of the calm Bendemeer.”—*Moore*.

“But how,” inquires the materialist, “shall the mind conjure up all these without a brain?” Just as it does with a brain; by magic, by miracle—by a manner that is neither more wonderful nor less possible than the present method of the mind’s workings. Not even the most scrupulous would hesitate to admit that nothing

could be more marvellous than the way in which the mind performs its operations through the brain. Who, then, will be so inconsiderate as to doubt or deny the possibility of the mind existing without a brain? In other words, who will aspire, or rather descend, to doubt a future spiritual existence, which would be not one jot more strange than the present existence? Indeed, we have but to ask how, why, when, and whence it came, and the very meanest object beheld will offer mysteries both profound and insolvable.

“All we behold is miracle; but seen
So duly all is miracle in vain.”—*Cowper*.

Who, then, surrounded by such incomprehensible wonders, will be so ignominious as to deny a reasonable, though a changed continuance of our being, and thereby shatter the widow's prop, and crush the orphan's hope, and rob the dying man's only alleviation, and add anguish to

“That tender farewell on the shore
Of this rude world, when all is o'er,
Which cheers the spirit, ere its barque
Puts off into the unknown Dark?”

It may be thought that if our immortal part consists only of the moral sentiments, and that, if by death we shall be (as Pollok says) “of all but moral character bereaved,” and left without the senses to feel heat and cold, wet and dry; the terms “future punishment” and “hell-fire;” must be merely hyperbolical. Admitting they are so, it would be but what is confirmable by that part of the Bible which says, “The wages of sin is death.” But, apart from this, the fact of the external senses not being exempt from death affords no support to the idea of there being no *future punishment*: for among the everlasting faculties is one which gives pleasure to the exercise of *duty and justice*. And be it known that this same faculty also creates *pain at the recollection of duties neglected*. If, from selfish or other motives, we have in our lifetime derided the poor, and done other things which we ought not to have done, after the extinction of those motives *conscience* comes into play, and demands, Why did I do this? and brings with it a sting ten thousand times more excruciating than the extremest sufferings of the body.

“Of all the numerous ills that hurt our peace,
That press the soul, or wring the mind with anguish
Beyond comparison, the worst are those
That to our folly or our guilt we owe.

In every other circumstance the mind
 Has this to say—' It was no deed of mine ;'
 But when to all the evil of misfortune,
 This sting is added—' Blame thy foolish self,'
 Or, worsèd far, the pangs of keen remorse—
 The torturing, gnawing consciousness of guilt—
 Of guilt, perhaps, where we've involvèd others ;
 The young, the innocent, who fondly loved us ;
 Nay, more, that very love their cause of ruin !
 O burning hell ! in all thy store of torments,
 There's not a keener lash !"—*Robert Burns.*

" That ill's corrosive, cares importunate,
 Are not immortal, too, O Death ! is thine."—*Young.*

" Not Chaos, not
 The darkest pit of lowest Erebus,
 Nor aught of blinder vacancy, scooped out
 By help of dreams, can breed such fear and awe
 As fall upon us often when we look
 Into our minds—into the mind of man."—*Wordsworth.*

It is related that a friar in Italy, remarkable for his piety and knowledge, being commanded to preach before the Pope, at the time of a jubilee, repaired to Rome some time before the day appointed, to see the manner of the conclave, that he might be enabled to accommodate his sermon to the solemnity of the occasion. At length, when the day arrived, having ended his prayer, he cried out with a loud voice, three times, " St Peter was a fool ! St. Peter was a fool !" and then came down from the pulpit. Being immediately questioned by the Pope concerning the unsuitableness of his behaviour, he made this reply : " If, holy father, a cardinal can go to heaven abounding in wealth, honour, and preferment, and living at ease, wallowing in luxury, and seldom or never preaching, St. Peter certainly was a fool, who took so hard a way of travelling thither, by fasting, preaching, praying, and humiliation." The Pope could not deny the reasonableness of the reply. Whether this story be true or false, it serves all the same to bring our minds to the fact that different persons have different ideas of the way of getting to heaven. Some expect to get there by fasting, some by praying, others by solitude ; and, indeed, the ways are so many and so contradictory that it is quite a matter of speculation to ascertain which is right. In this contingency, perhaps the sin will not be so very great in attempting to conjecture the most proper way.

Supposing, then, it should be that our happiness in the future depends upon *our present conduct*. Admitting that it is not a decided point, and that it is only probable even then, does not

the *uncertainty* of the matter argue urgent reasons why we should endeavour to make the most of every faculty entrusted with us? But, independent of such reasons, the *very existence of our faculties* sufficiently tells us that it is *our duty* to promote and develop them.

Thomas Paine, whom report tells to have been the greatest infidel writer that ever lived, believed in God and a future state. While he rejected the Bible as the true revelation of these, he accepted Nature as God's own work, in the laws of which are indelibly inscribed God's will; for he says, "The word of God is the creation we behold; and it is in this word, which no human invention can counterfeit or alter, that God speaketh universally to man." He also says, "The Creation speaketh a universal language, independently of human speech or human language, multiplied and various as they be. It is an ever-existing original, which every man can read. It cannot be forged; it cannot be counterfeited; it cannot be lost; it cannot be altered; it cannot be suppressed. It does not depend upon the will of man whether it shall be published or not; it publishes itself from one end of the earth to the other."

On looking, then, into this great book, the Creation, we find a chapter called "Man." This, like most chapters, is made up of parts (verses). Amativeness, the propensity on which depends the continuance of the species, may be regarded as the first verse in which we read the will of our Maker, commanding us to "be fruitful and multiply." The second verse, Philoprogenitiveness, shows it to be incumbent upon us to protect and comfort the helpless babe. By the other propensities, we may see all our social and domestic duties distinctly pointed out in the same way. Going from these to the Intellect, shall we conclude, because we find ourselves gifted with reasoning and observing faculties, that they were intended never to be used? Could any other than God compose all these parts that jointly constitute the mind? And seeing that Benevolence is one of these parts, shall we deny that it is his will that we should be kind to one another? Perhaps even the materialist will not object to such dictation; but, be this as it may, it has yet to be added that as Phrenology teaches, by the existence of a conscientious sentiment, that it is *our duty to be honest and truthful*, so by the sentiments of hope, wonder, and veneration, does Phrenology (or materialism, as it has been called) teach that man is made to HOPE, WONDER, AND ADORE.

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